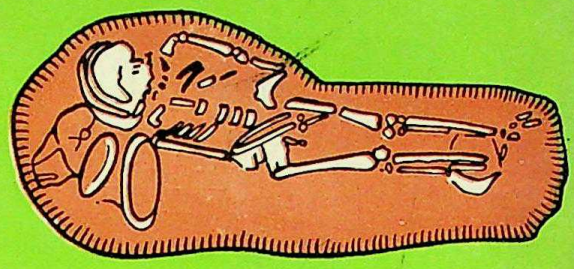
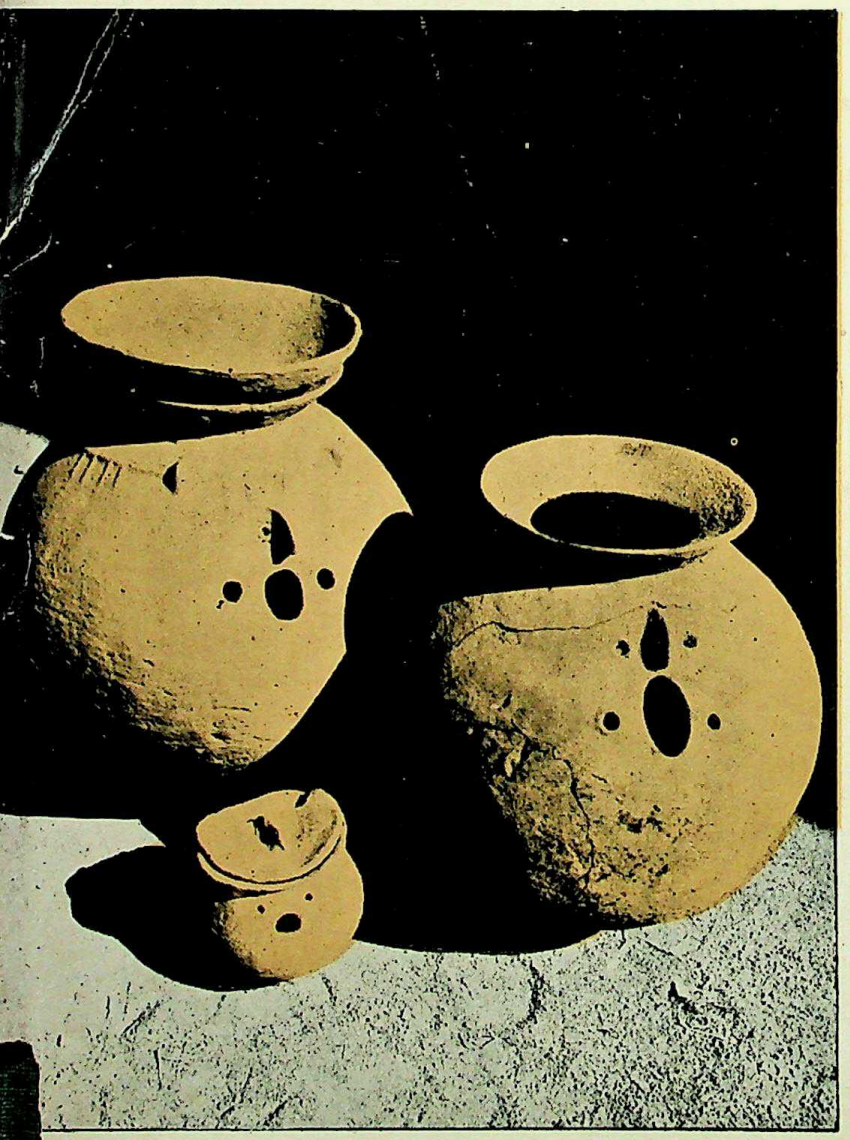
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

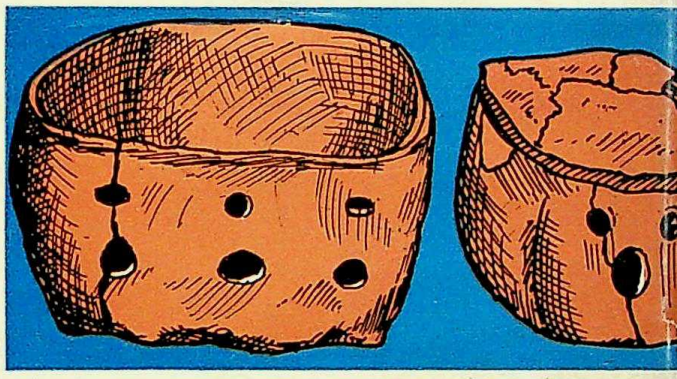
D
T AD
AN
PHYS L TYPES

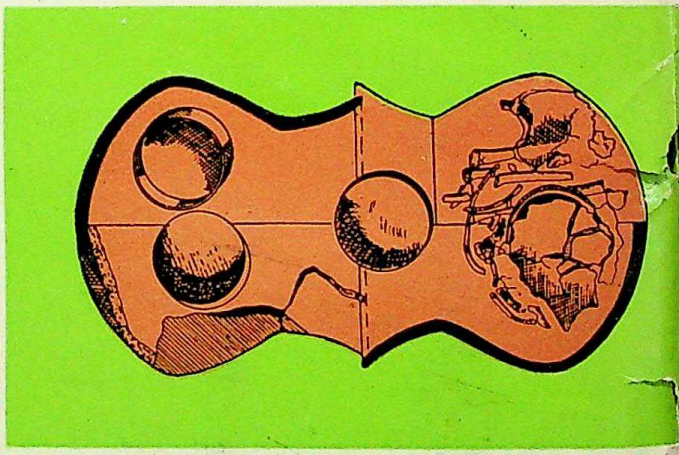
IN ANCIENT INDIA

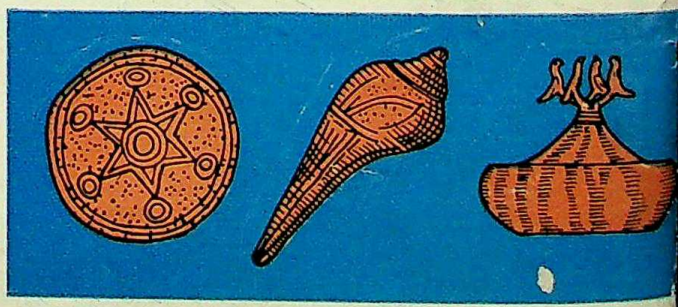


S. P. GUPTA









ORIENTAL PUBLISHERS

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

DISPOSAL OF THE DEAD
AND
PHYSICAL TYPES IN ANCIENT INDIA

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

जातसंस्कारेणेमं लोकमभिजयति
मृतसंस्कारेणामुंलोकम्

बौधायन पितृसूत्र iii. 1. 4.

"It is well known that through the Saṁskāras after birth one conquers this earth; through the Saṁkāras after the death the heaven."

Baudhāyana Pitṛsūtra, iii. 1. 4.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

S. P. GUPTA, PH.D.
KEEPER, NATIONAL MUSEUM, NEW DELHI

Disposal of the Dead and Physical Types in Ancient India

WITH 48 PHOTOGRAPHS AND 40 LINE DRAWINGS

1972

ORIENTAL PUBLISHERS
PATAUDI HOUSE, DARYAGANJ,
DELHI-6.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ORIENTAL PUBLISHERS
1488, PATAUDI HOUSE, DARYAGANJ,
DELHI-6 (INDIA)

4449

@
The Author

FIRST EDITION, Nov. 1972

Rs. 80.00

State Museum Library • Lucknow •

PRINTED IN INDIA

PUBLISHED BY JINDERJEET SHARMA, FOR ORIENTAL PUBLISHERS, 1488, PATAUDI HOUSE, DARYAGANJ, DELHI-6 AND PRINTED BY F. C. SHARMA AT LAKSHMI PRINTING WORKS, LAL KUAN, DELHI-6

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

To

Dr. Grace Morley and **Late** *V. D. Krishnaswami*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FOREWORD

Our young and ebullient archaeologist, one of the leading ones of his generation, has in this book dealt with more things than its matter-of-fact title indicates. Through the mortuary practices of the prehistoric (including protohistoric) peoples of India he has tried to understand the peoples themselves. His analyses of the prehistoric cultures not merely show the depth of his study but breathe a refreshing outlook. Particularly commendable are the chapters 'Introduction' and 'Polemics'. In the former he has *inter alia* dealt with the funerary practices of different peoples and has very significantly demonstrated that among the same people there are different practices varying with circumstances. Thus, multiple burial-practices in the same culture do not necessarily imply the intrusion of outsiders—a warning to the incautious archaeologist. In 'Polemics' he has assessed, among other things, the applicability of Childe's abstract theory on the directional changes in burial practices to Indian conditions and has concluded that in the Indian context any unidirectional change is hardly discernible. His study of the historical significance of Indian burial-customs and of how they represent social, economic and religious conditions of the respective people is sober and creditably lacks any undue and hasty conclusions which are apt to creep into such studies.

The last chapter of the book, 'Physical Types in the Pre- and Proto-historic Population of India', is by a colleague of the author, who knows his subject. There have been a great divergence of viwes and terminology in the field and some criticism of the methodology itself. I am not competent to have any views in the matter. The writer has, however, sometimes gone out of his way in drawing support of his analysis from some recent linguistic enterprises concerning the Harappans. Nevertheless, the study is admirable.

A. Ghosh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

AUTHOR'S PREFACE

The present study is a survey of a most popular subject with archaeologists in all countries : burial practices and races of ancient peoples. In India, however, the subject was not paid adequate attention. To the best of my knowledge, I was the first to take up the subject for the Ph. D. Thesis, although it was earlier suggested by Sri B. B. Lal to my friend and colleague Sri M. D. Khare of the Archaeological Survey of India, but his main interest has primarily been in temples and pottery. Unfortunately, due to my chequered career inside and outside the country, I could not complete it in time and meanwhile my another friend and younger colleague Dr. P. Singh did a commendable work in this direction and also published a monograph, which I have only recently seen. My friends and readers, however, know about my multidisciplinary approach, with a bias for sociology, towards all subjects of Humanities. I have often tried to look at the behaviour all pattern of human groups in the light of socio-economic and religio-political contexts, and to that extent, I feel, I have always to understand and say something more and different from what most of my friends in the service of archaeology in my country say. The difference between the two works is the difference between Dr. Singh and me, nothing more, nothing else.

Any study based on archaeological sources has the obvious limitations of an ever-expanding subject, by the time the book is out of the press half-a-dozen new discoveries await inclusion. But often that is only a matter of detail ; every discovery does not change our understanding of the past, generally it corroborates or expands the known facts in a wider perspective. Since the printing of the last pages of the book, a few C-14 dates of Late Stone Age sites have come to light. Sarai-Nahar-Rai, Distt. Pratapgarh, U. P., is now dated to the middle of the 9th millennium B. C. (TF. 1104= 10,345±110 B.P.). With the early date of Bagor (TF. 786=6430±200 B.P.) it is now increasingly becoming clear that this culture in India might go back to the beginning of the Holocene and not to 3000 B.C. only, as thought of earlier. Similarly, C-14 dates of some of the Kulli Culture sites come to 2000 B.C. (Nindovari Damb, 2065±110 B.C. ; and Niai Buthi P. 478=1900±65 B.C.) and it appears certain that the beginning of the Kulli Culture may not go back to 2500 B.C. as was thought of earlier. Similarly, the C-14 dates of the Pirak Culture of the Iron Age (earlier it was thought to be a chalcolithic culture) at Pirak (TF. 1202=1375±80 B.C.) when seen in the light of Iron Age Swat Valley graves at Loebanr (BM. 1030±150 B.C.), and the Painted Grey Ware Culture at Atranji-khera (TF. 191=1025±110 B.C.) our impression is gaining ground that iron had already knocked the doors of northern India round about 1000 B.C.

The Harappan site of Surkotada, in the Runn of Kutch, Gujarat, of about 2000 B.C. (TF. 1305=4005±100 B. P.) to 1750 B.C. (TF. 1294=3730±100 B. P.) has

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

recently been excavated by my esteemed friend and colleague Sri J. P. Joshi. He informs me that 'the cemetery of the period was located to the north-west of the city area. Excavations revealed that pot-burial was perhaps one of the modes of disposal of the dead. The grave pits containing pottery deposits and fragmentary bones were topped over either by a cairn or a slab.' More details are awaited. But as the things stand, it appears that the site is going to add some new information regarding the variability in burial practices within one and the same culture-complex; in the present case, in the Harappa culture.

This is all that may now be added ; the results of a few minor excavations, and C—14 dates of chalcolithic and other sites do not alter the situation, and, therefore, are not mentioned here.

x x x x

Some fifteen years ago, as a post-Graduate student, in 1955, in the University of Allahabad, I became interested in the Egyptian pyramids, and the philosophy of life and death that governed the royal houses of Egyptian pharoahs. My interest in the subject shifted to the rituals connected with death in my own country, mainly due to the personal interest that Prof. G. R. Sharma took in my archaeological studies. He sent me to Madras where, under the care of late V. D. Krishnaswami, the doyen of Indian Prehistory, I started my first lesson in the excavations of south Indian megaliths at Kunnattur. Besides Krishnaswami, those who contributed most at that time to my knowledge of the subject are Drs. N. R. Banerjee and A. Aiyappan, Sri Ballabha Saran and Sri K. S. Ramchandran who are still in the front line of scholars of Indian megaliths. But then the work slowed down considerably for a number of years following my joining the Archaeological Excavations Project at Nagarjunakonda in 1956 where I could not actively participate in the excavations of burials. In 1960, once again my interest in the subject revived when I had to prepare an essay for my Diploma Examination in Archaeology at the School of Archaeology, New Delhi. But once again the work slowed down following my departure to France, U. K. and several other countries in 1962-63. Subsequently, in 1965 I took up the same subject for my Ph. D. Thesis in the University of Delhi under the distinguished guidance of Dr. Romila Thapar and Sri B. B. Lal. But then, in 1968-69 I had again to go out, to U.S.S.R. and Mongolia. Thus, as I recall, behind this work many years of interrupted work is involved, as also the help of many scholars and teachers to whom the author expresses his deep sense of gratitude. I am particularly beholden to Dr. Romila Thapar whose constant vigil and pursuasion led to the accomplishment of this task. I am also thankful to the authorities of the University of Delhi for giving me permission to publish this revised version of my Ph. D. Thesis.

While preparing this work for publication, I requested my friend and colleague Sri D. Roychowdhury, Deputy Keeper, Physical Anthropology, in the National Museum, New Delhi, presently working for his Ph. D. degree in the Columbia University, to contribute a separate chapter (chapter 9) on the Physical Types of the Prehistoric and and Protohistoric population of India, which he readily agreed to. I, therefore, owe special thanks to him.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

I cannot adequately thank my several friends and colleagues in the University of Allahabad, National Museum, New Delhi, Archaeological Survey of India, and Deccan College, Poona, who have helped me in various ways—from going through the manuscript and preparation of illustrations to proof-reading and Index-making. Still I would like to mention the names of Sarvasri S. K. Sarkar, K. N. Dikshit, Munish Chandra Joshi, B. M. Pande, M. L. Sharma, M. S. Mani, Luxmi Dutta, B. B. Dutta, S. G. Tiwari, R. Chatterji, B. P. Asthana, C M. Srivastava, D. K. Kapoor, P. K. Jain, Bhagawat Sahi, Bal Krishna, G. Singh, and Km. Shashi Asthana, with a great sense of gratitude. I have particularly to mention the name of Dr. Brahmadatta, my friend and colleague, who very kindly offered many valuable suggestions and went through the last proof of the book. To Chhaya and Amrendra, my young colleagues in the Museum, who have done a lot for me in every possible manner, I have only blessings to offer.

I have absolutely no words to express my feelings towards my mother, Smt. Saraswati Devi, who has, during all these years, been taking all possible care to enable me to complete this work. Similarly, I am deeply beholden to Dr. Grace Morley, former Director of the National Museum, and Sri C. Sivaramamurti, the present Director for affording me all facilities to work and complete this project.

To Sri Inderjeet Sharma and Sri Nag Sharan Singh of the Oriental Publishers, the author is particularly thankful, since they have done the job in a much more friendly way than often visible in the publishing houses.

x x x

For illustrations in the book the author acknowledges the courtesy of the following individuals and institutions :

Director General of Archaeology in India, Shri M. N. Deshpande.

Director, Deccan College, Poona, Prof. H. D. Sankalia.

Head of the Department of Prehistory, University of Poona, Dr. V. N. Misra.

Head of the Department of Ancient History and Archaeology, University of Allahabad, Prof. G. R. Sharma, and Photographer in the same Department Sri M. C. Dikshit.

ISMEO and Editors, *East and West*, Rome. For a number of photographs of Swat Valley Graves.

Dr. A. Sundara, Lecturer, University of Dharwar.

Sri Krishna Deva, Director, School of Archaeology, Archaeological Survey of India, New Delhi, and Sri S. R. Varma of the same institution for arranging a few blocks.

Publishers and Printers of Dr. S. S. Sarkar's monograph *Ancient Races of Baluchistan, Punjab and Sind* (Calcutta, 1946)

Vijayadashami, 2028 V. S. S. P. G.
National Museum
New Delhi

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ERATTA

Page	*Para*	*Line*	*As Printed*	*To be read*
vii	1	12	Behaviour all	Behavioural
28	5	2	Secrifice	Sacrifice
75	2	2	*burial*	*buried*
112	3	Sub-heading	Inamgoan	Inamgaon
131	2	3	Caclined	Calcined
132	1	2	Fish-hood	Fish-hook
165	1	11	According	According to
166	Continued from back pege	22	ssmetime	sometime
173	1	4	A close slabs...	A close examination of the slabs...
196	2	5	Sarcophagisometime	Sarcophagi, sometime
224	2	10	Docorations	Decoration
-do-	3	1	Litthe	Little
225	2	6	Plestine	Palestine
230	2	8	VI have	VI, I have
232	Continued from back page	23	Immagrant	Immigrant
233	5	2	Prevalance	Prevalence
238	1	5	Credite	Credit
-do-	1	Last line	*Maṇimekhala*	*Maṇimekhalai*
239	2	8	Relegion	Religion
242	Continued from back page	7	Cetain	Certain
331	1	10	we	was

BIBLIOGRAPHY

Gururaja Rao, B. K., The Megalithic Culture in South India (Mysore, 1972)

Ramachandran, K. S., "Gulf of Oman: Original Home of the Indian Megalithis: A Reappraisal", *Purātattva*, No. 6, 1972-73. pp. 20-26

Singh, P., Burial Practices in Ancient India, (Varanasi, 1970)

DETAILS OF FIG. 30

Iron Objects : 1 spike, 2 dagger, 3 and 4 plaoughshares, 5 and 14 snaffle-bits, 6 axe with cross-bands, 7 stirrups, 8 bell, 9 sickles, 10 ring, 12 doudle-edged adze, 13 laddle.

Copper and Bronze Objects : 11 bowl with a lid decorated with four flower buds, 15 bowl with a lid decorated with four birds.

Nos. 5, 7 and 9 from Junapani ; 3 and 4 from Kamptee, and others, from Khapa, all near Nagpur.

MAPS

Facing Page 126 : Map showing Cairn burial sites

Facing Page 186 : Groups of Megalithic and Allied monuments in Eurasia

Facing Page 206 : Passage Grave types

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ABBREVIATIONS

Anct, Ind.	Ancient India
Anct. Pak.	Ancient Pakistan
Annl. Rept., ADB	Annual Report, Archaeological Department of Baroda
Annl. Rept., ADND	Annual Report, Archaeological Department H. E. H. Nizam's Dominions.
Annl. Rept., ASI	Annual Report, Archaeological Survey of India
Annl. Report, MAD	Annual Report, Mysore Archaeological Department
Bull. Dept. Anthp.	Bulletin of the Department of Anthropology
Bull. MGM	Bulletin of the Madras Govt. Museum, NS, vol. II, pt. I
Bull. MPGB	Bulletin Museum and Picture Gallery, Baroda
B.P.	Before Present (i.e., before 1950)
Bull. NISI	Bulletin of the National Institute of Sciences of India
ENPJ	Edinburg New Philosophical Journal
EW	East and West
IAFE	Internationales Archiv Fuer Ethnographie
Ind. Ant.	Indian Antiquary
IAR	Indian Archaeology, A Review
Imp. Sr., ASI	Imperial Series, Archaeological Survey of India
JARS	Journal of the Andhra Research Society
JAS	Journal of the Asiatic Society
JASB	Journal of the Asiatic Society of Bengal
JBRS	Journal of the Bihar Research Society
J Bom. Br. RAS	Journal of the Bombay Branch of the Royal Asiatic Society
JBU	Journal of the Bombay University
JIAI	Journal of the Indian Anthropological Institute
JKU	Journal of the Karnataka University
JMS	Journal of the Mythic Society
JOIB	Journal Oriental Institute, Baroda
JRAI	Journal of the Royal Anthropological Institute
JRAS	Journal of the Royal Asiatic Society
JUG	Journal, University of Gauhati
MAPS	Miscellanea of the American Philosophical Society
Memoir, ASI	Memoir of the Archaeological Survey of India
Memoir, Anthp. SI	Memoir of the Anthropological Survey of India
Memoir, IPH	Memoir of the Institute de Paleontologie Humaine
MJLS	Madras Journal of Literature and Science

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

NUJ	Nagpur University Journal
PPS	Proceedings of the Prehistoric Society
TASSI	Transactions of the Archaeological Society of South India
TLSB	Transactions of the Literary Society of Bombay
YBAPS	Year Book of the American Philosophical Society
ZE	Zeitsnhrift fur Ethnologie
ERE	Encyclopedia of Religion and Ethics, vol. IV (Edinb, 1911)
IP	Indian Prehistory : 1964, (Poona, 1965). Editors : V. N. Misra and M. S. Mate
SPPMI	Seminar Papers on the problem of Megaliths in India (Memoir No. 3 of the Department of Ancient History, Culture and Archaeology, Banaras Hindu University), Editor : A. K. Narain
AV	Atharvaveda
Āśv. Gṛ. Sū.	Āśvalāyana Gṛihya Sūtra
RV	Rigveda
Śat. Br.	Śatapatha Brāhamaṇa

NAMES OF JOURNALS NEWSPAPERS, ETC. QUOTED IN THE TEXT

Bhāratī	(Banaras Hindu University)
Cultural Forum	(Ministry of Education, Government of India)
Current Anthropology	(New York)
Dharmayug	(Hindi Weekly, Bombay)
Expedition	(University of Pensylvania)
Geographical Journal	(London)
Indica	(Heras Institute of Indian History and Culture, Bombay)
Iraq	(London)
Kuml	(Copenhagen)
Lalit Kalā	(Sāhitya Academy, Government of India)
Man	(London)
Man in India	(Ranchi)
Modern Review	(Calcutta)
Nature	(New York)
Purātattva	(Bull. of the Indian Archaeological Society)
Revue des Arts Asiatique	(Paris)
The Journal of Near Eastern Studies	(London)
The March of India	(English Daily)
Times of India	(")

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CONTENTS

AUTHOR'S PREFACE vii

ABBREVIATIONS xi

ILLUSTRATIONS xvii

INTRODUCTION : Plurality of Burial Practices 2 (a) Social factors (Functional Approach) 2-4 (b) Natural factors 4-5. Variability of Funerary Practices 5-7. The Basic Question 7-8. Scope of Work 8. The Problems and possibilities 8. Limitations and Possibilities 9. Disposal of the Dead : Varying Modes 9-11. Burial Monuments and Memorials 11-12. Source Material (a) Archaeological explorations and excavations 12-13 (b) Ancient Indian literature and tradition 13 (c) Anthropological determination of physical types 13-14. Periodization and Chapters 14-15.

CHAPTER 1 : STONE AGE CULTURES : 16-31

Early and Middle Stone Stages 16-17. Late Stone Stage: General 17-18. *Rock-Shelter Sites* (a) Panchamarhi 18 (b) Baghai-Khor 18-19 (c) Lekhahia 19-22. *Sand-Dune Sites* (a) Bagor 22-25 (b) Langhanaj 26-28. *Ganga Basin Sites* (a) Sarai Nahar Rai 29. Summary and Conclusions 29-31.

CHAPTER 2 : THE CHALCOLITHIC COMMUNITIES OF BALUCHISTAN : 32-50

General 32-33. *Northern Group* (a) Periano-Ghundai 33-34 (b) Moghul Ghundai 35-36 (c) Dabarkot 36 (d) Kulli 37 (e) Mehi 37. *Southern Group* (a) Nal 40 42 (b) Shahi-Tump 42-44 (c) Sutka-gen-dor 45-46. Summary and Conclusions 46-49. Chart Showing the Distribution of Burial Types in Chalcolithic Baluchistan 50

CHAPTER : 3 THE HARAPPA AND RAVI CULTURES 51-79

General 51-53. *Harappa Culture* (a) Harappa 53-59 (b) Chandigarh 59-60 (c) Mohenjodaro 60 (c) Chanhudaro 61-62 (d) Kalibangan 62-67 (e) Rupar 67-68 (f) Lothal 68-69 (g) Randal Dadwa 69 (h) Torkhanwala Dera 70. *Ravi Culture* Cemetery 'H' (a) Startum I, 71-72 (b) Stratum II, 72. Population Structure of Cemetery 'H' 73-75. Summary and Conclusions 75-79.

CHAPTER 4 : NEOLITHIC AND NEOLITHIC-CHALCOLITHIC CULTURES 80-124

PART I : NEOLITHIC STAGE

(a) Burzahom 82-83 (i) Human Burials 84-87 (ii) Animal Burials 87-90 (iii) Significance of bones painted with red ochre Summary and Conclusions 91-92.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

PART II : NEOLITHIC-CHALCOLITHIC CULTURES

General 92 (a) Nagarjunakonda 93-95 (b) Palavoy 95 (c) Piklihal 96 (d) Tekkalkota 97-100 (e) Brahmagiri 100-102 (f) Hallur 102 (g) T. Narsipur 102 (h) Terdal 103 (i) Kovalli 103 (j) Nevasa 103-108 (k) Daimabad (109-110 (e) Chandoli 110-112 (m) Inamgaon 112-113 (n) Bahal-Tekwada 113-116 (o) Pandu-Rajar-Dhibi 116-118 (p) Sonpur 118-119 (q) Chirand 119. Summary and Conclusions 119-124.

CHAPTER 5 : CAIRN BURIALS OF BALUCHISTAN 125-146

General 125-126. *Sites in Northern Baluchistan* (a) Moghul Ghundai 126-128 (b) Chaperkai Hills 128 (c) Tor-Dherai 128 (d) Sur Jangal 128-129. *Sites in Central Baluchistan* (a) Quetta 129 (b) Nal 129. *Sites in Southern Baluchistan* (a) Zayak 130 (b) Shahdinzai 130 (c) Wahir 130 (d) Mazenda Damb 130-131 (e) Kulli 131. *Sites on the Makran coast* (a) Jiwanri 131-132 (b) Take Dap 132-133 (c) Gatti 133 (d) Zangian 133-134 (e) Damba Koh 135-137 (f) Nasirabad 137. *Sites in the Las Bela Plains* (a) Jeman Goth 137-138 (b) Kanar 138. *Sites in Persian Makran and Kirman Regions* (a) Sari Asiab 139 (b) Fanuch 139 (c) Tump-i-Gabraha 139. Summary and Conclusions 139-146.

CHAPTER 6 : MEGALITHIC AND ALLIED MONUMENTS OF NORTHERN INDIA : 146-183

PART I : THE SWAT VALLEY GRAVES

General 146-153 (a) Balambat 153-154 (b) Thana 154-155 (c) Sites near Saidu Sharif 155-156 (d) Butkara II, 156 (e) Katelai I, 156-158 (f) Loebanr 158 (g) Sites near Pacha, in Buner 168-159 (h) Tarike, Lalbatai and Sogalai 159 (i) Pulanr 159. The Swat Valley Graves and the Early Aryans 159-160. Literary Evidence 160-167. Summary and Conclusions 168-170.

PART II : THE CEMETERIES OF EASTERN U.P. AND RAJASTHAN

General 170-171 (a) Kakoria 171-173 (b) Banimilia-Bahera 173-174 (c) Chunar 174 (d) Kotia 174-176 (e) Sites in Districts Banda and Rewa 176 (f) Khera 176-177 (g) Satmas 177 (h) Dausa 177-178.

PART III : THE GRAVES OF NORTH-WESTERN INDIA
Leh 178

PART IV : NECROPOLISES IN SIND
Karachi 178-179

PART V : A SITE IN GUJARAT
Amreli 179-181

Summary and Conclusions 181-183

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 7 : THE HALLUR CULTURE AND PENINSULAR MEGALITHS 184-240.

General 184-186. Uniformity and Variability of the Culture-Complex 186-188. The 'Megalithic Culture'—An unhappy Term 188-191. Chronology 191-194. Typology and Distribution 194-199. (a) Brahmagiri 200-204 (b) Jadganhalli 204 (c) Maski 205 (d) Halingali 206 (e) Terdal 206 207 (f) Hunur 207-208 (g) Hallur 208 (h) Sanur 208-209 (i) Paiyampalli 209-211 (j) Kunnattur 212-213 (k) Yelleswaram 213-214 (l) Nagarjunakonda 214-215 (m) Kesarpalle 215 (n) Junapani 215-216 (o) Kampti 216-217 (p) Khapa 217-211 (q) Devikulam 221 (r) Maski 221 (s) Piklihal 223 (t) Dhanora 223 (u) Adichanallur (v) Amrithamangalam 224-225. Origin of Indian Megaliths : Problems and Prospects 225-232. Physical Types 232-233. Literary Evidence (Tamil) 233-236. Summary and Conclusions 236-240.

CHAPTER 8 : THE POLEMICS 241-268

General 241-242. Origin and Original Basis of Religion 242-247. Mousterian Burials 247. Prehistoric Burials : Indian context 247-248. Burials : A Source of Religious History of India 248-249. Directional Changes in Burial Practices : A Critique (i) Disposal of the corpse 250-251 (ii) Place of burial 251 (iii) Grave-goods 251-254 (iv) Sepulchral monuments 254-255. Indian Burial Practices : Historical Significance 255-257. Burials Represent Their Time: General 257-258 (i) Late Stone Stage Burials 258 (ii) Hallur Culture. Peninsular Megaliths 258-260 (iii) The Kashmir Valley Neolithic Culture 260-261 (iv) Chalcolithic Village Communities of Baluchistan 261-262 (v) The Harappa Culture 262-263 (vi) Swat Valley Graves 263-265 (vii) Cairn Burials of Baluchistan 265-266 (viii) The Vindhyan Cairns 266-267 (ix) The Saurashtra Cairns 267-268.

CHAPTER 9 : PHYSICAL TYPES IN THE PRE—AND PROTOHISTORIC POPULATION OF INDIA : *By D. Roychowdhury* 269-313

Introduction 269-274. Physical Types in Pre-and Protohistoric India—The Skeletal Evidence : General 274-275 (i) The Palaeolithic and Mesolithic 275-276 (a) Langhanaj 276-278. The Bronze Age (a) Mohenjodaro 278-282 (b) Chanhudaro 282-283 (c) Harappa 283-293. The 'Bronze Age-Chalcolithic Period' : Physical Types and their Variability 292-293. The Neolithic-Chalcolithic of the Deccan : General 294-295 (a) Maski 295 (b) Tekkalkota 295-296. The Megalithic Complex of South India : General 296-297 (a) Raigir 297-298 (b) Brahmagiri 298-299 (c) Yelleswaram 299-300 (d) Adichanallur 300-301 (e) Jewurgi 301. The Origin of Megalith builders 301-303. Summary and Conclusions 303-305. References 306-313.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDICES

I. Important C-14 Dates 314-316.

II. Harappa, Cemetery 'H' : Paintings on Burial Jars 317-318.

III. Iron Implements in Peninsular Megaliths : Some Parallels in La Tene Assemblage 319.

IV. Chalcolithic Urn Burials : Parallels in West Asia and Tribal India 320-321.

V. Gulf of Oman : The Original Home of Indian Megaliths 322-335.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

LIST OF ILLUSTRATIONS

Plates

I. Lekhahia, Extended burial in a rock-shelter, Late Stone Age
II. Bagor, Extended burial on the floor of a hut, Late Stone Age
III. Bagor, Extended burial, Chalcolithic Culture
IV. Harappa, Extended burials in Cemetery R 37, Harappa Culture
V. Harappa, Coffin burial in Cemetry R 37, Harappa Culture
VI. Chandigarh, the excavated cemetery, Harappa Culture
VII. Kalibangan, Extended burial on a bed of pots in a pit lined with mud bricks, Harappa Culture
VIII. Kalibangan, Rectangular pit with offerings without skeletal remains, Harappa Culture
IX. Kalibangan, Pot burials without bones, Harappa Culture
X. Rupar, Extended pit burials with offering pots, Harappa Culture
X (a). Lothal, 'Double Burial' in a rectangular pit, Harappa Culture
XI. Tarkhanwala Dera, Cremation ground, Harappa Culture
XII. Harappa, Jar burials from Cemetery H, Ravi Culture
XIII. Harappa, Jar Burial with Fragmentary bones, Ravi Culture
XIV. Harappa, Flexed Earth Burial, Ravi Culture
XIV (a). Burzahom, Reclining burial with the remains of a sacrificed animal, Neolithic Culture
XV. Brazahom, Animal burial in a pit, Neolithic Culture
XVI. Brahmagiri, Single Urn Burials, Chalcolithic Culture
XVI (a). Tekkalkota, Multiple Jar burial with an Extended body, Chalcolithic Culture
XVII. Brahmagiri, Single Urn burial with an infant's complete skeleton, Chalcolithic Culture
XVIII. Nevasa, Extended burial of a grown up child, Chalcolithic Culture
XIX. Daimabad, Extended burial with post-holes, Chalcolithic Culture
XX. Inamgaon, Extended pit burials, Chalcolithic Culture
XXI. Inamgaon, Double Urn Burial, Chalcolithic Culture
XXII. Pandu-Rajar-Dhibi, Extended burials, Chalcolithic Culture
XXIII. Pandu-Rajar-Dhibi, Double Urn burial, Chalcolithic Culture
XXIII (a). Pandu-Rajar-Dhibi, Fragmentary bones in an Urn burial, Chalcolithic Culture
XXIV. Zangian, General view of cairn burials, Iron Age
XXV. Moghul Ghundai, bronze pot
XXVI. Moghul Ghundai, Iron arrowheads
XXVII. Katelai, 'Visage Urns'
XXVIII. Katelai, Terracotta 'Box Urn' burial, Swat Valley Graves

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

XXIX. Katelai, General view of the excavated graves, Swat Valley Graves
XXX. Lalbatai, an Urn burial, Swat Valley Graves
XXXI. Pulanr, a Cist burial, Swat Valley Graves
XXXII. Kakoria, General view of the cairn burials, Chalcolithic Culture
XXXIII. Kakoria. pit-within-pit in a cairn burial, Chalcolithic Culture
XXXIV. Kakoria, an excavated cist below a cairn, Chalcolithic Culture
XXXV. Kakoria, an overground cist, Chalcolithic Culture
XXXVI. Kotia, a 'Transepted Megalith' with animal bones, Iron Age
XXXVII. Amreli, a cairn burial, Iron Age
XXXVIII. Amreli, cairn- circles, Iron Age
XXXIX. Brahmagiri, Megaliths of Cist-circle type, Hallur Culture
XL. Maski, Extended pit burial, Hallur Culture
XLI. Kaladgi, Passage Grave with circular chamber
XLII. Kaladgi, Passage Grave with enclosure
XLIIa. Terdal, Passage Grave of Greek Cross type
XLIII. Halingali, Passage circular chamber
XLIV. Junapani, Metal objects, mainly iron, from megalithis, Iron Age

APPENDICES

Plan of a rock-cut tomb (No. A6) at Hureidha, Hadhramaut
Broken slab with port-hole from a round-tomb structure at Hili
A cemetery in northern Jol consisting of a large number of 'triliths'
A terracotta bath tub type sarcophagus of Neo-Babylonian time from Bahrain
Three views of a cranium from a Chalcolithic Urn burial excavated at Nevasa
Surkotada, Oblong pit burial with a big central pot ; Harappan period (2100 B.C.)
Barkheda, Extended burial in a rock-shelter, Chalcolithic period (C. 1500 B.C.)

MAP AND DIAGRAMS

Fig. 1. Racial Map of India, Bangladesh and Pakistan, p. 273
2. Frequency distribution curves of cranial indices of Harappa skulls, p. 288
3. Frequency distribution curves of cranial indices of Harappa, Tepe Hissar, Chuhra and other Indus Valley crania p. 290

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

LIST OF ILLUSTRATIONS

Figures

1. A part of the burial ground : Lekhahia, Mirzapur, (U.P.) facing, p. 20.
2. Flexed burial, Langharaj, facing p. 25
3. The location of the Middle Stone Age Cemetery, Sarai-Nahar-Rai, Pratapgarh, facing p. 29
4. Urn burials, Periano-Ghundai, p. 34
5. Funerary pots, Shahi Tump, p. 43
6. Flexed burials, Shahi Tump, p. 45
7. Double Urn burial, Nevasa, p. 105
8. Multiple Urn burial, Nevasa, p. 105
9. Extended burials, Inamgaon, p. 112
10. Grave pottery, Tekwada, p. 115
11. False Extended burials, Nagarjunakonda, p. 121
12. Offering pots, Nagarjunkonda, p. 121
13. Cairn burial cemetery, Zangian, map, p. 134
14. Cairn burials from different sites, facing p. 136
15. Pots from Cairn burials, p. 141
16. Swat Valley Graves, Timargarha, p, 149
17. Swat Valley Grave Sites, map, p. 151
18. Visage Urn from a Swat Valley grave, p. 152
19. 'Double Burial' and 'Box-Urns', Swat, p. 155
20. Urn and Cist burials, Swat, p. 157
21. Rock-cut cave, Kerala, p. 198
22. Cist burial, Brahmagiri, p. 201
23. Pit burial, Brahmagiri, p. 203
24. Grave-goods, Sanur, p. 210
25. A trench in the habitational area at Paiyampalli, (Tamilnadu), facing p. 210
26. Typical Megaliths excavated at Kunnattur, Chingleput, facing p. 212
27. Pit-circle, Nagarjunakonda, facing p. 214
28. An iron cauldron, Khapa, p. 218
29. Face-cover of a horse, Khapa, p. 218
30. Iron and Bronze objects, Khapa, etc., p. 222
31. Tools and weapons of iron, Adichanallur (Tamilnadu), facing p. 224

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

INTRODUCTION

Burials and funerary rituals have been at most times, and for most people, the most important thing in the world. This is, probably, due to the fact that men have been obstinately disbelieving the phenomenon of death as the logical end of life. For them, death is not the final dissolution of man's complete being, they have faith in the existence and immortality, as also separability, of the soul. Death, for them, only separates the soul from the body, which, of course, does not imply the total serverance of relations with the dead. People have imagined a constant rapport between the living and the dead. Indeed, for the Saoras of Orissa death is not an end, it is never a 'separation' as such, "there is not a single festival or ceremony which they (soul-men) do not attend ; they are affectionate and aggressive by turns, interested in what is going on — always ready to talk, all too often ready to interfere."[1]

As a logical corollary of this belief man evolved the concept of 'world of souls' with a 'hell' and a 'heaven'. Since man is finite, he cannot imagine much beyond what he sees in this world. For him, the 'world of souls' could hardly be different from the 'world of men'. Not only that, the 'hell' could not be worse than the 'worst' he experiences in his life ; and 'heaven' better than the 'best' he enjoys in the world of men. That is why the needs of the 'soul-man' could hardly be imagined as different from that of the living man. No wonder, therefore, that in the Royal Graves of Ur we get the remains of the entire paraphernalia which accompanied the buried king : his queens, concubines, courtiers, servants, chariots, crowns, furniture, food, playthings and all the rest he used during his lifetime in the world of men.[2] This concept becomes vividly clear when one sees a primitive Bantu uttering the following words on the grave of his dead relative :

---

1. Radin, Paul, *Primitive Religion*, pp. 221-22.
2. Woolley, Leonard, *Ur Excavations*, vol. II, pp. 16 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

"Good bye ! Do not forget us !
See, we have given you tobacco to smoke
and food to eat !
A good journey to you !
Tell old friends who died before you
that you left us living well !"[3]

PLURALITY OF BURIAL PRACTICES

Burial customs and funerary rituals are, however, not the same everywhere. Not only that, within a single society, ethnically and culturally united, one finds more than one mode of the disposal of the dead adopted simultaneously. The plurality of burial practices is often due to a number of reasons, some of which may be recounted as follows :

SOCIAL FACTORS (FUNCTIONAL APPROACH)

It has been often observed that funerary practices were used not only to serve the ends of religion but also to regulate the social life, whose norms have been laid down by the Elders. Thus, punishments of hell for transgressing the social laws and rewards of heaven for leading an ideal social life are well known prescriptions of religion. But these punishments and rewards are invisible because man is expected to get them only after his death. In the visible form also, however, such distinctions are made so that people may lead a disciplined life within the accepted social frame-work. These are shown in the treatment meted out to the dead body or in the construction or placement of graves. Thus, those who break the social laws are denied some of the prescribed death rituals and their bodies are disposed of in some unusual manner. For example, until recently, the northern side of the Christian grave-yard was exclusively used by the priests for burying those who transgressed the social laws, for example those guilty of not paying off the debt, as also of patricide and matricide.[4] Among the Lo Dagga tribes of Africa 'sinners of suicide, murder, sexual intercourse outside human habitation' and the like are not buried in the village cemetery but far away, near a water-course or in trenches.[5]

In ancient Greece executed criminals were denied all religious rituals associated with burial. Similarly, traitors and those guilty of sacrilege were refused burial at

3. Smith, E., *The Religion of Lower Races*, p. 29.
4. Goody, J., "Death and Social Control among the Lo Dagga," *Man* 1959, No. 204, p. 13 ff.
5. *Ibid.*, p. 136. See also his monograph, *Death, Property and the Ancestors*, (London. 1962).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

home.[6] The ancient Romans sewed up a cock, the emblem of impiety, in the sack in which patricide was interred.[7]

In some of the legends popular among the NEFA tribes a murderer is shown cut up in pieces; a liar has his tongue pulled out; a thief has his hands tied together and dipped in boiling oil, etc.[8] Among the Marias of Madhya Pradesh, those who commit suicide are not buried in the village cemetery but far away from it.[9]

Many more examples of a similar nature could be quoted to show that those guilty of matricide, suicide, adultery, sacrilege, etc., are not treated at par with those not guilty of such anti-social behaviour, insofar as the death rituals are concerned. Those condemned socially are equally condemned by religion. Since man is as much, if not more, concerned about his life after death as about his life before death, he often refrains from doing things which might deny him rites suitable to lead a happy life in the world of the dead he is expected to enter after death. Obviously, death rituals and funerary practices often aim at chastising the living beings so that the social order is not broken from within.

As the punishment of improper burials is prescribed for anti-social behaviour so also special rites and, pomp and show, as well as special modes of burial, are recommended for persons doing good social work and are of some status, e.g., the kings, queens, priests, nobles and chieftains. The kings and nobles of Egypt were buried in pyramids and *mastabās* ; the relics of the Buddha and distinguished Buddhist monks were entombed under imposing *stūpas* ; over the remains of the Scythian warriors were erected huge mounds ;[10] the Wanchos of NEFA bury their chief in an wooden coffin and the Khasis of Assam make a mummy of their dead chief and bury the body in a hollowed-out trunk of a tree.[11] These are fabulous in contrast with those afforded to the commoners, e.g., in Egypt and Mesopotamia the commoners were only wrapped in mats and buried in trenches or simple pits. The idea is again the same, the social order has to be preserved ; the king in the life time is also the king after death, and it is the sacred duty of the survivors to respect that status. Such recognitions are widespread and they have always been there. J. Goody has rightly observed this phenomenon as follows :

"Funerals are inevitably occasions for summing up an individual's social personality, by a restatement not only of the roles he has filled, but also of the general

6. *ERE.*, p. 420.
7. *Ibid.*, pp. 505-9 ; also Goody, *op cit.*, p. 137.
8. Elwin, V., *Myths of the North-East Frontier of India*, p. 281.
9. -do- "Funeral Customs in Bastar State". *Man in India*, vol. XXV (1945), p. 93.
10. *The Dawn of Civilization*, p. 320.
11. Gurdon, P.R.T., *The Khasis*, p. 138.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

way in which he has conducted himself during his lifetime. The composition of the obituary, whether a written report in a newspaper, a funeral oration in an ecclesiastical building, or a mimetic performance at the graveside, involves, directly or indirectly, a public reformulation of social norms that itself serves as a sanction on behaviour. Of equal importance is the way in which mortuary institutions perform this function by providing for the differential treatment of the bereaved in the funeral ceremonies, the corpse at burial, and the dead in the after-life."[12]

NATURAL FACTORS

Distinctions in death rituals and burial practices are also made due to certain natural factors, such as death due to contagious diseases, or death in an accident, or in a state of taboo. Ethnological literature makes it amply clear that such deaths are 'bad', i.e., occurring due to the displeasure of evil spirit or witchcraft or some other divine or semi-divine being. A peculiar sense of fear pervades the family and community whenever such 'bad deaths' occur. Special rituals and the denial of some legitimate rituals are always witnessed during the disposal of the dead body of such persons.

Death in a state of taboo

Death during pregnancy and at the time of child-birth is also considered 'bad', since it is regarded as the period of taboo (*sūtakās*) for women. Thus, among the Oraons of Palamau, the dead bodies of such women are disposed of by driving nails ,needles and thorns into the soles. The underlying idea is to prevent them from becoming evil spirits and creating physical and financial troubles to the survivors[13].

Death due to contagious disease

Primitive beliefs also consider death due to a contagious disease, like small-pox, cholera, typhoid and leprosy as 'bad'. Such deaths are usually attributed to the influence of evil spirits. The dead is, therefore, disposed of in a manner different from that in which others are disposed of. Thus, some of the Karnataka castes and tribes, who usually bury their dead, resort to cremation for those who die from contagious diseases, like leprosy.[14] The Khasis, on the other hand, resort to burial in all such cases because the accepted mode of disposal of the dead with them is cremation.[15]

---

12. Goody, J., *Death ,Property and the Ancestors*, pp. 29-30.
13. *The Census of India* : 1931, p. 117.
14. Rao, C.H., "Mysore Castes and Tribes", *JMS*, vol. 13 (1922-23), p, 546.
15. Gurdon., *op. cit.*, pp. 135-36.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Death in an accident

Among the bad deaths are also included deaths due to drowning, snake-bite, an attack by a wild animal, and the like. The dead bodies in all such cases are also not buried in the usual manner. The Thadou Kukis of Assam, for example, prescribe burial for those who die in accidents occurring outside the perimeter of the village.[16] The Uparas, Vaddas, etc., of Mysore bury the bodies of such persons below a cairn of stones.[17]

These details make it amply clear that it is not the singularity but the plurality of funerary practices which is the socio-religious 'principle', if that term can at all be used. Clearly, if in archaeological explorations and excavations one comes across more than one type of burial associated with one and the same culture-complex one need not necessarily interpret this phenomenon in terms of 'new people', 'new cultural strain', etc. As shown above, they may have been caused due to any of the above factors, social or natural. It does not, however, rule out the possibility of the emergence of new burial 'forms' purely as a result of 'culture-contact situations' to which anthropologists like Malinovski[18] and Robert Redfield[19] have repeatedly drawn our attention and of which we have several examples in historical times. The gradual replacement of post-exposure megalithic burial practice by cremation in south India is a most glaring example of a culture-contact situation leading to changes in the modes of the disposal of the dead. In it the 'Great Tradition' from the north (the Vedic tradition) had the decisive role to play over the 'Little Tradition' of the south (the folk tradition), in the terminology evolved by Redfield.

VARIABILITY OF FUNERARY PRACTICES

Another interesting question often asked is whether the funerary practices prevalent in a society form a stable trait of that society or not. Archaeological writings often contain statements which indicate that the funerary customs prevalent in a society do form a very stable trait. Thus, writing about the burial customs of Indus Civilisation, Sarkar said, ".....so much of human feelings are associated with it that no man except in case of exigency would be prepared to change the traditional funerary ceremony."[20] It is certainly true of most of the organized societies sufficiently regulated by religion. Since, practically in all of them, the burial customs are more or less completely governed by religion, whose basic features and frame-work remain static, the modes of disposal of the dead automatically remain stable. One is buried according

16. Shaw, W., "Notes on the Thadou Kukis", *JASB*, NS, XXIV (1928), p. 56.
17. Rao, *op. cit.*, p. 546.
18. Malinovski, B., *The Dynamics of Culture Change*, pp. vii-viii, 14-26.
19. Redfield, Robert., *Peasant Society and Culture*.
20. Sarkar, H., "Disposal of the Dead at the Indus Valley and its survivals among the Aboriginal Peoples of India", *Man in India*, vol. XXXI (1951), No. 1, p. 23.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

to the dictates of one's religion ; one can opt for a different mode of burial only by changing one's religion.

Ethnological writings, however, contain statements which indicate that funerary practices form a variable trait. Thus, writing about the primitive peoples, Kroeber said, "..... the variations between adjacent peoples, and the numerous instances of coexistence of several practices within one population constitute a powerful argument for instability.....The details of funeral ceremonies, like those of wedding ceremonies, vary considerably from village to village."[21]

The apparent contradiction in the writings of two disciplines is true but not real. It is true, because both the statements are supported by evidences, but it is not real because the evidences produced are selective and do not belong to similar situations.

The Indus Civilization exhibits all the elements of a socially and economically stable society. Its remains, found either within the Indus valley or beyond, show an overall uniformity. In all probability, it had some common religious cults; at least in Sind, Punjab and northern Rajasthan. Little wonder, the burial practices observed at all the Harappan sites show more or less similar features. But the same is not true with most of the primitive peoples ; they are economically backward and socially divided into innumerable groups, the basis of which are often taboos, traditions and regional differences. Within a single tribe several socio-religious sections are found. Thus the socio-economic fragmentation and backwardness, coupled with magico-religious taboos of all types, explain vividly the causes of variability in the funerary practices of the primitive peoples all over the world. From the Indian sources we can give a very good example. The Dublas of Gujarat, who were traditionally cremating the dead bodies, have very recently changed to burial since their jungles, the source of free fire-wood, have been acquired by the government and the poor people cannot afford purchasing fire-wood in the market.[22] It is a typical case of 'economics' determining the choice of a particular mode of the disposal of the dead.

Acculturation is now a common feature with the primitive peoples. It takes place because they are very often used as manual labourers by the urban populations nearby. Not only that, even the welfare States are helping them to come out of their areas of isolation and enjoy the fruits of a new technological world. Missionaries of

---

21. Kroeber, A.L., "Disposal of the Dead", *American Anthropologist*, NS, 29 (1927) p. 312. See also Leshnik, L.S., "Archaeological Interpretation of Burials in the light of Central Indian Ethnography", *Zeitschrift fur Ethnologie*, Band 92, Heft I. (1927), p. 27.
22. Shah, P.G., *The Dublas of Gujarat*, p. 88.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

all religions are infiltrating into them and changing their older faiths. In the Indian context the Christian missionaries of all shades are especially busy in such activities in Assam, Nagaland, NEFA, etc. These and similar other factors contribute towards the socio-economic and religious changes occurring amongst the primitive peoples. In the ultimate analysis, they are responsible for the variability in the funerary practices often observed and recorded by ethnologists.

A closer study of both the situations makes it clear that funerary practices are stable in societies either in a developed and stable stage, socially and economically, or rigidly bound by the dictates of religion. They are variable in societies which are primitive and undergoing acculturation. It is happening today as it may have happened in the past.

THE BASIC QUESTION

Now the question is as to how far the archaeologists can understand all these variabilities and meanings underlying the funerary practices in the context of the prehistoric man, particularly when all rituals do not leave distinct and detectable traces. With regard to this Childe aptly remarks : "all the archaeologist can study is Man's behaviour, the material expressions of his spiritual life. Qua archaeologist, he cannot recapture Neanderthal man's ideas about future life, nor the theory of Cro-Magnon magic".[23] Surely, the archaeologist can understand with certainty only rituals and not eschatology ; and that too only those rituals which have left some tangible material traces.

The material expression of Man's spiritual life, i.e., the graves, often shows a marked similarity in time and space, and, to that extent, it is called 'the Cult of the Dead'. Afterall, they do reflect the 'attitudes of mind' of the prehistoric man towards the deceased. There are many disturbing forces in nature, man fears the pain from the wounds inflicted by them but the greatest of all these fears is always the fear of death since it is the point of no return, and the agony it is supposed to accompany is immense and inexplicable. Death, therefore, provides not only the strongest stimulus for a thorough shake-up of man's emotions but also of man's mind. This creates an abnormal situation for serious introspection conducive to eschatological beliefs, although their early forms may largely remain unintelligible to us since they are not likely to have been formalized or even systematized. Nevertheless, the material expressions of the prehistoric man, to the extent that could be understood and studied, provide

23. Childe, V.G., "Directional Changes in Funerary Practices during 50,000 years", *Man* (1945), No. 4, Jan-Feb., p. 13.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

us a unique opportunity of knowing the changing pattern of human behaviour in matters of life and death and, hence, are highly significant.

SCOPE OF WORK

This monograph deals particularly with burials, both of the Primary and Secondary types; it does not fully take into account cremation, although post-cremation burials, wherever recorded, have been included. This has been done not only to complete the picture but also to give proper recognition to their status of 'secondary burials'. However, they have only been touched upon and not elaborated since, strictly speaking, they form part of cremation which requires a separate study. Similarly, memorials have also been only mentioned and not detailed for the simple reason that they are not always connected with the actual burial of bones or the dead body. The author visualizes a second volume of this work devoted to cremation.

Burials involve at least five things : the sepulchral monument, the skeletal remains, the mode of the disposal of the dead body, the rituals, and the grave-goods. Care has been taken not to exclude any one of them, as also the placement of burials in relation to habitation and topography of the region, since sometimes it has a direct bearing on the socio-economic life of the people, as one can see in the pattern of life of the megalith builders of south India. (See chapter X)

THE PROBLEMS AND POSSIBILITIES

The existing studies of Indian burials do not give a systematic cultural, social and historical interpretation of funerary practices. Many archaeologists have generally treated them as 'types' of an artefact, such as 'cordiform handaxes' and 'microlithic triangles'. They have been described as 'Rectangular Cists', 'Pit-Circles', 'Jar burials', etc. These type-labels, by themselves, convey very little about the life and time of the people who built them. Similarly, elaborate descriptions concerning their construction, or long lists of grave-offerings, often given in archaeological reports, have very little meaning in terms of the societies which gave them a particular form. We have to put, therefore, the following questions to our material and seek clear answers (the list of which can, of course, be enlarged) :

Do the burials throw light on the dark chapters of India's prehistory ? Do they reflect their time, i.e., whether it was the period of peace, or of migrations, or acculturation, or turmoil ? Do they help us in the reconstruction of the socio-economic life of the people ? Do they corroborate as well as supplement the evidence of the cultural life as gathered from the habitational areas ? Do they establish the 'religious behaviour' of the people, particularly among those who have not left material traces of any other form of religion ?

Answers to these and similiar other questions are likely to present an integrated study of Indian burials in a real socio-cultural and historical perspective, and fill a long standing lacuna in our knowledge.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

LIMITATIONS AND POSSIBILITIES

The archaeological evidence is, by its very nature, fragmentary and cannot provide the same amount of possibility in each case. Interpretation of its data is like walking on a razor's edge where great caution is necessary. Beyond a particular limit it may lead to utmost subjectivity and even fantasy. Childe's 'Social Evolution' contains many such instances, such as a twin burial, one body of a male and the other of a female, has been interpreted as 'a subordination of the female to male'.[25] Care has, therefore, been taken to try and avoid such temptations. However, interpretation without some subjectivity is a total negation of the term 'interpretation'. The only requirement for an interpretation is proper 'evidence', primary or circumstantial, relevant as also reasonable, and within the range of 'possibility' in terms of context and time-space relationship. Every effort has been made to respect these limitations while offering a suggestion. It may, however, be made clear that we have taken the 'holistic' view of the situation ; it means that all social and cultural institutions are inter-related. Their relationships create a frame-work in which things move in an organized manner. In due course of time social structure gets crystallized, traditions are formed and the mannerism of the disposal of the dead becomes a stable trait. It follows, therefore, that by and large uniformity in burial practices means a crystallized social structure and universally accepted moral norms. Obviously, the evidence of burials does not remain confined to any particular aspect of life ; it can be profitably utilized to understand different aspects of the life of a people.

DISPOSAL OF THE DEAD : VARYING MODES

There are many ways in which a dead body is disposed of, but variations are only matters of details. The basic modes are limited in number and may be enumerated as follows under three major headings, Burial, Cremation and Cast-away :

BURIAL

Complete Inhumation

This is also called 'Primary' or 'Articulate' burial. The dead body, in this type of burial, is interred in full. The position of the body may be either fully stretched or bent at the knees. In the former case it is called 'Extended burial', and in the latter 'Flexed' or 'Crouched' burial. The body may also be folded or tightly flexed, recalling the 'Embryonic' position. It may also be buried in Sitting, Reclining or Standing positions.

In a single grave there may be one, two or several dead bodies, and these are called, respectively, Single, Double (also Twin) and Multiple (also Collective) burials.

25. Childe, V.G., *Social Evolution*, p. 43.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In a 'Double' burial the two bodies are sometimes arranged in an embracing posture and is apologetically called '*Satī*' type burial.

Before a body is buried, it is variously treated. In ancient Egypt it was mummified; in certain modern tribes it is dessicated under the smoke of fire. It is sometimes also covered with red ochre or coated with red-ochre paint.

Fractional burial

It is variously described as 'Secondary', 'Disarticulate' and 'Fragmentary' burial. It is sometimes also called 'Post-Exposure' or simply 'Exposure' burial.

The dead body, in the burials of this type, is at first either cut into pieces or is exposed to the elements on a natural or constructed platform, where it is largely devoured by birds and beasts. Thereafter, the bones are collected and buried. Usually, they are placed as haphazardly as they are picked up, but occasionally a conscious effort is made to arrange them in an articulate fashion, as far as possible. In the latter event they are called 'False-Extended' burials.

A Fractional burial may also be Single, Double or Multiple, depending upon the number of persons whose bones are buried.

The bones are often washed and dried and, sometimes, also treated with red-ochre before they are buried.

Reburial

As indicated by the term 'reburial', the body, in the first instance, is buried in a pit, and then at a later date fully or partly exhumed. In most cases only the skull is removed and reburied either in a pit or in an ossuary. The custom of 'skull burials' is practised not only among the present day primitive people[26] but has also been in vogue in the past.[27]

Cannibalism

The dead body, in this type of burial, is made an item of food in a ritualistic feast. The idea underlying cannibalism of this type was more or less the same everywhere. It was believed that by partaking of a particular person's flesh one could

---

26. Elwin, V., *Myths of the North-East Frontier of India*, p. 279. The examples belong to the Wancho tribe. Also see, *Census of India* ; 1931, vol. I, pt. III. p. 164, for similar customs among the Kuku Nagas.

27. Kenyon, K.M., *Archaeology in the Holy Land*, p. 52. The examples come from the Neolithic levels of Jericho. The skulls were coated with mud and lime and facial features painted to make them perfect human masks.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

acquire the distinguished qualities of the dead.[28] In most cases the skull of the dead body is especially preserved or buried because that alone is supposed to represent the seat of man's valour.

CREMATION

Post-cremation Burials

The burning of the dead body is called cremation. Cremation seldom annihilates all bones ; the skull and spinal bones are often found charred but not reduced to ashes. The survivors of the dead take care of such partially burnt bones out of regard for the deceased. They bury them directly in pits or in the pots kept in pits. Now-a-days, the ashes collected in pots are cast away in sacred rivers or lakes.

CAST AWAY

When the body is exposed as a final ritual it is called 'cast-away'. It does not involve the burial of the residual matter. The body is cast-away on a hill or a tree, or in a jungle or river, or just outside the habitation. These burials have not been included in this study because they do not leave any trace.

BURIAL MONUMENTS AND MEMORIALS

The survivors took all the steps that they could to preserve the earthly remains of the dead and to perpetuate his memory. One of these steps included the erection of burial monuments which could be of any shape, size or material. They are found ranging from the huge pyramids to small heaps of stones and from crude megalithic dolmens to the most sophisticated mausoleums, like the Taj. They include simple platforms, called the *Samādhis*, as also the elaborate *stūpas :* simple stone-circles as well as monumental Mexican ziggurat.

Memorials, although by and large unconnected with funerary objects, have also been included because they too are intended to preserve the memory of the dead. Memorials in India include Menhirs, *Satī* Stones, *Chhatarīs*, Gates, etc., but excepting menhirs, none appears in the prehistoric context.

RECEPTACLE OF BONES

The receptacles of bones, calcined or non-calcined, are of many types. The simplest type is a pit, or natural rock-shelter or cave ; slightly more elaborate is an urn, or sarcophagus made of earth, stone, wood or metal. The classic receptacles are cists or boxes of stone, brick or wood, which have been reported from several countries of the world, including India. Similarly, underground caves or chambers

28. Frazer, J.G., *Golden Bough*, (Abb. Ed.), p. 497. Ashantees chiefs killed Charles M'Carthy in 1824 and devoured his heart hoping that by doing this they would imbibe his courage.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

have also been well known receptacles of bones in Palestine and Arabia as well as in India.

SOURCE MATERIAL

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

The cultures considered in this work are only prehistoric and protohistoric. Archaeology, in the absence of literary data, is the only source which supplies us tangible material for reconstructing the history of these cultures. Explorations and excavations often lead to the discovery of deeply buried graves and overground sepulchral monuments.

It is not always easy to understand the 'spiritual life' underlying these material expressions (i.e., graves), particularly, when there is total absence of written or unwritten traditions about them. Some help is, therefore, necessarily sought from the ethnological parallels because, in the ultimate analysis, man's behavioural pattern matters more than mere stones, pots and bones found in graves. The ethnological parallels offer a glimpse of the meaning and purpose of identical practices in vogue under conditions not very different from those prevalent during the dawn of human history because it cannot be denied that "the past is contained in the present even though the earlier theory of 'survivals' has been abandoned in the form in which it was formerly held."[29] The ethnological analogies, however, cannot be expected to yield precise information about the significance of the belief and customs of Early Man.[30] Moreover, apparently similar rituals, even when simultaneously followed by different peoples, are often found conveying differnt meanings. For instance, cremation, extended and flexed burials amongst ancient Romans, Britons and Indians were never adopted with one and the same view regarding the life after death. Very often the form of a ritual remains more or less the same over a long period of time but its meaning undergoes changes from time to time.

The ethnological parallels have, therefore, been used to a minimum. They have been used neither as projections of the past nor as explanations of the unintelligible practices, but simply as secondary aids to our understanding of the past.

The evidence of burials gathered by the archaeological sources is ample except for the Early and Middle Stone Stages, of which not a single burial has so far come to light.

---

29. James, E.O., *Prehistoric Religion*, p. 117.
30. *Ibid.*, p. 15.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

All the relevant archaeological material has been used and interpreted as far as possible. Old excavated material and explanations, often based on heresay and folklore and given by casual diggers working under now obsolete methods and theories (digging like potatoes and talking in terms of Turanian and Druidic settlements in India[31]) have been generally ignored for obvious reasons.

ANCIENT INDIAN LITERATURE AND TRADITION

The Texts alleged to refer to burial practices, occurring in the ancient Sanskrit and Tamil literatures, have also been considered. This has been thought necessary because the dates, commonly assigned to them, fall under the periods covered in this study. The references to burials in the Vedic literature is extremely meagre. In the Dharma Śāstras references to post-cremation burial are sufficiently large but there is hardly any for non-cremation burials. In the Tamil literature, references occurring exclusively in the Śaṅgam literature have been considered since only they are supposed to contain the traditions going back to the 3rd-2nd century B.C. Occasionally, traditional folk-lore and inscriptional references have been quoted to elucidate the references contained in the ancient literature.

The archaeological and literary evidences have been correlated as far as possible. In this respect we have been more successful in the case of south Indian burials and the references in the Śaṅgam literature, than in the case of north Indian burials and references in the Sanskrit literature. This is probably due to the fact that while burial was still widely practised when the Śaṅgam literary works were composed, this was not the case when the Sanskrit works were compiled. Even during the period of the *Rigveda* cremation, and not burial, was the popularly accepted mode of the disposal of the dead.

ANTHROPOLOGICAL DETERMINATION OF PHYSICAL TYPES

Archaeological excavations of graves yield not only the grave-offerings but also the bones of the dead. The bones are studied by physical anthropologists who determine the physical type of the dead. It is possible to know, by cross-checking any new data with the one already available, something about the 'racial composition' of the population, original homes of peoples and periods of their migration. These informations are

31. Congrave, H., "On Druidical and other antiquities between Mettapoliam in Coimbatore and Karnul on the Tungabhadra", *MJLS*, vol. XXIV. (1878), Caldwell, R., "Sepulchral urns in Southern India", *Ind. Ant.*, vol. VI, (1877), p. 279-280. It records the tradition about the urn burials according to which they belonged to the Jain saints.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

particularly useful for understanding the origin of certain customs. This has been demonstrated with considerable success in the case of south Indian megaliths[32] and with different degrees of success in other cases also[33]. The paucity of skeletal remains is, however, a great hindrance in arriving at definite conclusions as also in evolving correct methodology.[34]

PERIODIZATION AND CHAPTERS

The present work covers the period from the Early Stone Stage to the beginning of the Christian era, and the story presented here belongs to the peoples who had either no writing or whose writing has not yet been deciphered. Obviously, the basis accepted for periodization is that adopted by archaeologists and is known as 'Culture Periods', the term 'Culture' stands for 'material culture' expressed in terms of objects largely made of stone, bone, clay and metal. Braidwood has rightly pointed out that the term 'Age' has inherently a sense of universality, while human history is by and large regional; while the Middle East was passing through a highly civilized stage of culture in the 3rd and 2nd millennia B. C., in several other parts of the world people lived in different stages of the prehistoric economy and technology. Therefore, in this work, the term 'Stage' has often been preferred to 'Age'.*

The nomenclature of the three-fold protohistoric culture-complex of India adopted here is the one largely used by the archaeologists dealing with India's past. They are thus : (a) Chalcolithic Settlements of Baluchistan, (b) Harappa and Ravi Cultures of Punjab, Sind, etc., and (c) Neolithic-Chalcolithic Cultures of Western India and the Deccan. All of them are to be classed under the Chalcolithic Stage from the view point of technology in vogue.

The nomenclature of the two-fold early historic culture-complex of India are the Cairn Burials of Baluchistan and the Megalithic Monuments of India. Both of them are to be placed under the Early Iron Stage in terms of prevalent technology. A separate chapter has been allotted to each one of the above culture-periods subject to the following exceptions :

---

32. Sarkar, S.S., "Human Skeletal Remains from Brahmagiri", *Bull. Dept. Anthp.*, vol. IX, No, 1, (1960) pp. 5-25. He has tried to establish that "its (Sialk Necropolis B's) brachycephaly may be responsible for the brachycephaly of Brahmagiri".
33. Sophia, Ehrhardt and Kennedy, K.A.R., *Excavation at Langhanaj*, 1944-68, pt. III, pp. 47-49.
34. Sen, D.K., "Ancient Races of India and Pakistan—A study of Methods", *Anct.Ind.* No. 20-21 (1964-65), pp, 178-205.

* The nomenclature of the four-fold prehistoric culture-complex of India adopted here conforms to the decision of a special committee appointed during the First International Conference of Asian Archaeology held in 1961 at New Delhi ; only the term 'Age' has been replaced by 'Stage' as indicated above. Thus they are the Early Stone Stage, Middle Stone Stage, Late Stone Stage and Neolithic Stage.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Early and Middle Stone Stages have been completely omitted since not a single burial belonging to these periods has come to light, so far. On the other hand, the period of megalithic monuments has been divided into two : The Northern Megalithic and Allied Monuments, and the Southern Megaliths, for the two are often different culturally. The work is mainly based upon archaeological data, although literary data has also been discussed wherever deemed necessary. A separate chapter has been allotted to the study of ancient Indian Physical Types.

The monograph ends with an Epilogue which establishes one thing : the burials, in a big way, help us in reconstructing one aspect of the ancient religion and some aspects of the socio-cultural and economic conditions of prehistoric and protohistoric India.

It may be seen that in the above scheme the terms such as 'Aryan' and 'Aryan Migration' have been generally omitted. This has been done to avoid unnecessary controversies. It is, afterall, a well known fact that howsoever strong the arguments may be in favour of the linguistic relations between the Vedic Aryans and the West Asian or Central Asian peoples the archaeological evidences do not support them so well.[35]

For each period, a time bracket has been suggested. By and large, this is based upon the C^{14} dates available so far, but allowance has been made for marginal variations inherent in all radio-carbon dates. It is possible to achieve exactness in calendar years only in the case of highly documented events of the historical periods. Some relative dates, based upon circumstantial evidence, usually worked out by archaeologists for such culture-periods for which not a single C^{14} date is available, have been accepted with slight modifications. This is particularly so with regard to the Chalcolithic cultures of Baluchistan.

At the end it may be reiterated that from the time man became a social being, all institutions—cultural, economic, religious, social, etc.—worked in close collaboration and interdependently. Obviously, one reflected the other. The institution of the disposal of the dead, in which graves are made and offerings are placed, affords a unique opportunity in the task of reconstructing the life of a people as a whole.

---

35. Thapar, B.K., "The Aryans : A reappraisal of the Problem", *India's Contribution to World Thought and Culture*, (Madras, 1970), pp. 135-146. The author has discussed practically all the archaeological theories put forward so far.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 1

STONE AGE CULTURES

Early and Middle Stone Stages

The cultural horizon of India opens with large assemblages of extremely crude stone implements of the Early Stone Stages found, practically, all over India. Men, women and children who owned them must have roamed about a host of arterial river valleys where the tools are often discovered. Divided into innumerable hunting groups, these people seem to have enjoyed a comparatively close life in sharing common technical know-how of tool-making. While some of these groups specialized in making roughly fan shaped choppers and chopping-tools, others shattered any suitable stone and shaped it into a beautiful pointed implement, called 'handaxe'. From the lower Himalayas to the Kaveri and from the lower basin of the Sabarmati to the lower reaches of the Ganga, a thousand and odd sites have produced such tools and tool-assemblages which testify to the existence of man in India, going back to the Middle Pleistocene period, some half-a-million (?) years ago.[1] But the question is often asked as to where are the skeletal remains of those men and women who fabricated these curious looking stone tools. How did they look like ? Where are the graves and cemeteries of those who died in those days of the remote past ?

Lack of Evidence of Burials

Unfortunately, we are not in a position to answer any of these questions. So far, not a single bone of the Early Stone Stage man has come to light anywhere in India, although the first discovery of his tools goes back to 1863, i.e., more than a hundred years ago.[2] Similarly, no grave, sepulchral monument or memorial, which may be attributed to him, has been found anywhere in India. We really do not know if the dead was at all disposed of ceremoniously. We also do not have any idea of his physical features or spiritual culture. His solitary memorial is an infinitude of stones.

---

1. Sankalia, H.D., *Prehistory and Protohistory in India and Pakistan*, Chapters I to III.
2. *Studies in Prehistory*, (D. Sen & A. K. Ghosh-Ed.), Introduction.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The picture remains the same in the following period also. The Middle Stone Stage is equally devoid of any evidence whatsoever of human bones, graves or memorials, although explorers have discovered hundreds of the Middle Stone Stage sites in India where the flake-blade tools are found in abundance.

In the European and African, and to some extent West Asian, context the position is not that sad. True, the known examples of human bones in the Lower Palaeolithic world are found in such odd placements that hardly any one of them can be regarded as belonging to a regular 'burial', but the skeletal remains encountered in the Middle and Upper Palaeolithic sites are numerous and betray 'burials of the strictest definition'. They contain not only some perfectly articulate skeletons but also exhibit unmistakable traces of several funerary rites, e.g., regular burial pits fenced around by stones or big animal bones, or putting a bed of flowers for the body, or bones painted with red ochre, or bodies decorated with ornaments.[3] However, as said above, in the Indian context of comparable time-scale such evidence is sadly missing.

This position, however, changes substantially in the following period. The Late Stone Stage sites have produced some very good examples of burials located within the inhabited areas.

LATE STONE AGE

The Late Stone Stage in India is somewhat technologically comparable to the Mesolithic Age of Europe. When the cyclic order of the Ice Ages of the Pleistocene period ends, the world enters into the period of modern climate, called "Holocene". This seems to have happened some ten to fifteen thousand years ago. First in Europe and Africa and then in India, the stone tools witnessed a complete change. Instead of big and heavy tools man now made very small tools called 'microliths', obviously because of their size. On purely typological grounds they are divided into two groups : Geometric and Non-Geometric ; the former includes tools shaped like triangles and trapezes of all possible forms. It is generally held that the Geometric microliths appeared later on the scene than the Non-Geometric microliths. In the Indian context the art of making pottery also developed with the later group, although at Baghai-Khor, District Mirzapur, it appeared with the earlier phase. It may, however, be mentioned that the earliest phase of the Late Stone Stage Culture has been met with in the Adamgarh Rock-shelters, M.P. It is dated to 6000 B.C. (C^{14} date), and it is devoid of pottery.

The Late Stone Stage had hunting and fishing economy of a comparatively modest scale but the habitat of the people was strikingly varied. While some of them preferred to live in natural caves and rock-shelters, others adopted all sorts of eviron-

3. James, E.O., *Prehistoric Religion*, pp. 17-28.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ment, except thickly forested areas where their simple composite tools of microliths would not have been at all effective. They are thus found occupying some of the modest sand-dunes in Rajasthan and Gujarat deserts, the kankery and sandy banks of several rivers in Rajasthan, U.P., Madhya Pradesh and Bengal, the raised beaches on the Eastern and Western coasts, the wastelands of the peninsula, etc. Their concentration was, however, in the Vindhyas, the Doab and the coastal regions, the first under the naturally protected rock-shelters, the second in the Ganga basin, and the third near lagoons, rivers, and blow-outs with seasonal ponds.[4] We may, therefore, be justified in treating the burial sites of the Late Stone Stage under three broad groups—the Rock-shelter group, the Sand-dune group, and the Ganga basin group.

ROCK-SHELTER SITES

Panchamarhi

The site is situated on the picturesque Mahadeo hills in the heart of Madhya Pradesh. One of its shelters was excavated in 1935-36 in a very casual manner by G.R. Hunter, primarily a soldier, and not much scientific data can be gathered from the brief report.[5] It, however, refers to a human skeleton found deep down a trench. In the light of other discoveries discussed below, this appears to be an example of a regular burial.

Baghai-Khor

The site is located in a rock-shelter near the village Bhaisaur, District Mirzapur. It was excavated in 1963-64 by R.K. Varma.[6] The 55 centimetre thick habitational deposit with four layers has been divided into two culture-periods, the Geometric and Non-Geometric ; pottery was, however, associated with both.

Extended Burial

Only one grave was discovered in the shelter. It belonged to the upper phase of the Geometric period and was found buried in layer 2. The skeleton appears to be of an adult woman of 20 to 21 years of age and 152.68 cm. of height.

First, a fairly deep pit, reaching the bed-rock, was dug. The rocky base was then dressed in a slightly concave shape. The western edge was distinctly raised into some sort of a platform to serve as a pillow. Since the pit was concave, even the legs remained raised and the body was sagging. The burial was oriented west-east, the head being towards the west. It was found completely covered with a mass of thin stone chips. In all probability, it replaced the self-same earth generally used to cover the body in the grave-pit. The spreading of the stone-chips, therefore, was one of the

4. *IP*: 1964, pp. 57-79.
5. Hunter, G.R., "Final Report on the Excavation in the Mahadeo Hills", *NUJ*, No. (1936), p. 31 ff.
6. Varma, R.K., *IP*: 1964, p. 74.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

last rituals which left detectable traces ; we do not know if it was followed by ritualistic dances and feasts similar to that which mark the death-ceremonies of the aboriginals in the back woods of the State.

Looking at the elaborations, it is possible to say that the whole act of making the grave involved several persons. The dressing of the bed-rock in the Stone Age could never be an easy job, and it is still a matter of some speculation as to how it was done. The ritual of spreading stone chips on the grave, probably, necessitated the presence of all the near relatives of the deceased, everyone throwing a handful of these chips.

Anthropological studies have shown that "the lower limbs (of the body), as compared to the upper ones, were comparatively stout and strong with well developed areas of muscular attachments. This indicates that the lower limbs were in greater use than the upper ones".[7] What does this observation mean is anybody's guess ; probably, the woman had to wander about too much, up hill and down hill.

Lekhahia

The site is situated some 69 km. from Mirzapur, on the Mirzapur-Rewa road. It forms part of a group of rock-shelters in the Kaimur range of the Vindhyas. Lekhahia, incidentally, is also the name of the entire hill, along with these shelters.

All the rock-shelters at Lekhahia are serially numbered, the excavated shelter is No. 1 which measures 11 x 10 metres. The total habitational deposit is only 43 cm. thick. It is a single culture deposit consisting of pottery and Geometric microliths, same as found in the Upper Level of Baghai-Khor. There is, however, a distinct level below the lowest plastered floor of this culture-period which, according to the excavator, represents the pre-Microlithic phase,[8] a claim which needs further exploration.

Extended Burials

As many as seventeen burials have been excavated at the site. All of them are complete inhumations of extended type. The skeletons were found laid on their backs in oblong pits, which often went deep enough to touch the bed-rock. Unfortunately, three of these skeletons were found badly damaged, and even the pit-lines of these graves could not be clearly marked.[9] There was excessive cutting and recutting of the graves, too many super-impositions, considerable disturbance created by more recent pits, but they have been clearly classified as belonging to eight distinct levels, called

7. *Ibid.*
8. Sharma, G.R., *IP*: 1964, p. 79.
9. *Ibid.*, p. 78.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

'periods' by the excavator.[10] The skeletons, as well as the periods, were serially marked, from the upper-most to the lowest example. Their distributional pattern is as follows :

Culture-period	Period or Level	Skeleton No.
Late Stone Stage : (Geometric Microlithic Level)	I	II
	II	III
	III	IV
	IV	V, VIII, IX and XI
	V	X, XII and XIV
	VI	XIII and XV
	VII	XVI
Pre-Microlithic Level	VIII	XVII

There are three missing numbers in the above list—skeleton nos. I, VI and VII. As reported earlier, they were extremely damaged and their stratigraphic positions were much disturbed and disputed.

It is significant to note that the skulls of skeleton nos. I, II, XII and XIV were found completely missing. We can only make a conjecture that the removal of the skulls was intentional and ritualistic and that some sort of a 'cult of the skulls' was in vogue. What it actually meant in terms of religion, myth and philosophy is beyond our comprehension. It could be a case of reburial of the skulls somewhere else or the examples of headhunting and trophy making. However, we cannot be too sure of these propositions.

For purposes of burial, a shallow and oblong pit was dug and the dead body placed in it, with the head towards the west and the legs towards the east, as at Baghai-Khor. The pit was then filled with the self-same earth. According to the excavators, the offerings to the dead comprised only microliths since they alone have been found kept in groups and in good number. It is, however, not clear from the report whether the graves were sealed with a spread of stone chips, as was the case at Baghai-Khor, or not. (Fig. 1 and Plate I)

10. *Ibid.*, p. 77.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

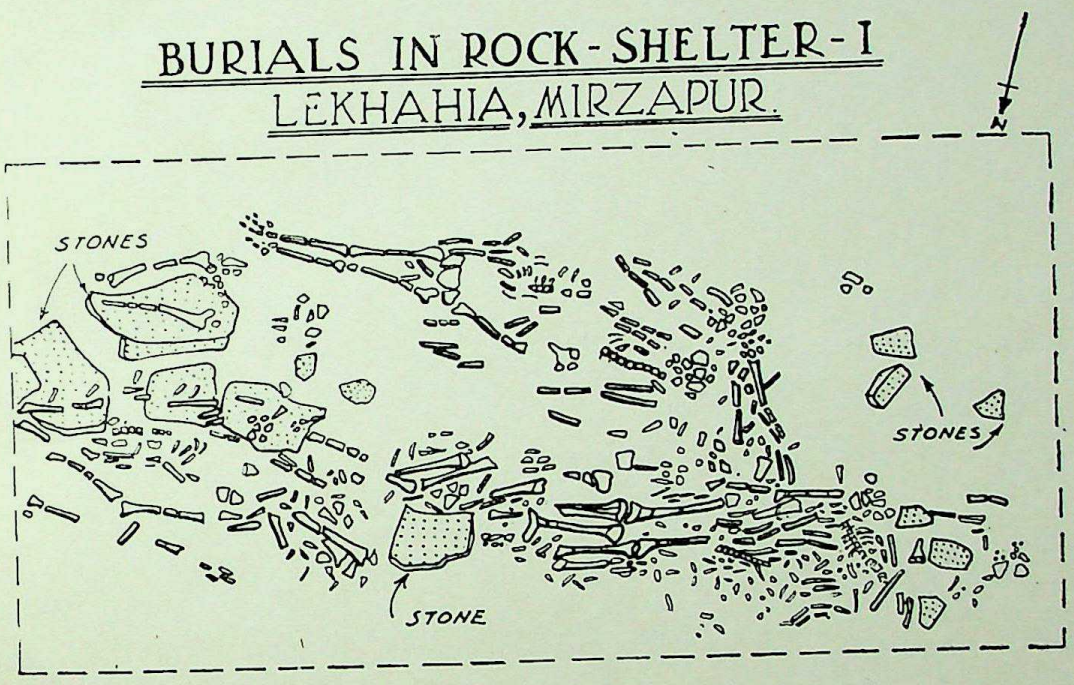


Fig. 1, *a part of the burial ground*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The normal orientation of the graves was west-east, the head being towards the west, as was observed at Baghai-Khor. There were, however, specific deviations in at least two examples : in one, the grave was oriented north-south, and in the other, it was oriented south-north, the heads being kept towards the north and south, respectively.

On the whole, the bones, microliths, etc., found in the lower levels were much more encrustrated than those discovered in the upper levels. This, of course, may or may not indicate their relative antiquity since calcification is a natural phenomenon controlled by rains, percolation of water, and calcium present in the soil or the rock.

The discovery of these burials has posed some very interesting problems. It has been observed that the graves were laid within the habitational deposits of the rock-shelters. Was it then the case of house-burials in which the bodies are buried below the living floors ? It has also been noted that the graves were laid in the interior-half of the shelter. Does it then imply that while one part of the shelter was used for the burials, the other was left for living purposes ; or else, the shelter was temporarily, but completely, deserted to avoid the awful smell of the decaying body ; afterall, house-burial was an unhyginic practice ?

4449. These are difficult questions to answer. An attempt has, however, been made here to understand the sequence of events. In this connection two things should be clearly noted : firstly, stratigraphically, the habitation at the site was a continuous one with eight distinct floor-levels ; and, secondly, the graves were laid within the occupational debris, particularly, during the time of the occupation of the shelter. Once these two facts are established. things become more or less clear. People living in the shelter occupied the whole of it but whenever someone in the family or the group died, they shifted and congregated in the front-half of the shelter, leaving the rear-half for the burial. It is possible that temporarily the rear-half was isolated and the people did not occupy it for living purposes. After the lapse of a stipulated period, once again, the rear portion of the shelter was occupied and the entire improvised 'chamber' was hubbing with activity. It remained so until a new death occurred and the entire process of shifting from the rear end, burying the body in a pit dug there, and reoccupying the entire floor was repeated. It happened so at least eight times during the occupation of the shelter.

This at once raises the question as to whether it was a case of 'house-burial' or 'cemetery'. Before answering it the meaning of the term 'cemetery' will have to be explained. A cemetery is a place where the dead bodies are habitually buried and where people do not live. According to the first half of the definition the shelter was a cemetery but according to the other half it was not. Looking at the evidence in the Eurasian context where during the Mesolithic period caves and rock-shelters were

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

simultaneously used as places both for living and burial,[11] one would prefer to call them 'house-burials'.

SAND-DUNE SITES

Bagor

The site is located about a kilometre east of the village Bagor, on a sand-dune standing on the left bank of the Kothari, flowing through District Bhilwara in Rajasthan. The surroundings are rocky and sparsely wooded. The site is under excavation since 1967 by V.N. Misra.[12] The total cultural deposit ranges in thickness from 1.60 to 1.75 metres. The occupation at the site was a continuous one, but on technological grounds it has been divided into three periods : pd. I (earliest) is characterised by Geometric microliths, pd. II by the addition of copper artefacts, and pd. III by the appearance of iron implements. The microliths are, however, found throughout the deposit but their frequency had progressively reduced, going from bottom to the top of the site. The stone-tools were manufactured at the site, probably, within the dwellings, as is evidenced from the large number of cores and waste-flakes. Handmade pottery, red as well as dull brown, appeared first in pd. I but decidedly became established in pd. II ; wheel-turned pottery was met with only in the habitational debris of pd. III.

There is no evidence of permanent dwellings at the site, except, probably, a wall of stones and bricks in pd. III levels ; period I and II, however, yielded floors paved with large flat schist slabs and reinforced by pebbles. They usually measured three to four metres in length and width. Besides, in a few examples some stones were found arranged in circular outlines, in diameter of two to three metres ; obviously they were the remanents of the outer packing of the circular huts.

In period I, as well as period II, the economy was mainly based upon hunting. Large quantities of charred and uncharred bones of the spotted deer, hog deer, stag and Indian wild boar, jackal, rat, monitor lizard and turtle have been found on and beyond the floors of the dwellings. In pd. II levels, however, some evidence of primitive food-production has also been found present. The excavations have yielded perforated circular and oval stones, sometimes used as weights for digging sticks, and stone querns and rubbers used generally in grinding grains.[13]

Burials have been found belonging to all the three periods. So far, only five of them have been encountered in the excavated trenches ; one in pd. I levels, three in

---

11. Clark, G., *World Prehistory*, pp. 64-5.
12. *IAR*, 1967-68, p. 49.
13. Misra, V.N., "From Stone to Metal", *The Times of India*, dated 21-9-1969. Also, "Excavations in Rajasthan", *JMS*, Vol. *LVIII* (1967-68), pp. 12-16.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

pd, II levels, and one in the overlap levels of periods II and III. Further excavations are likely to yield more burials, particularly those belonging to pd. I since only limited digging was undertaken in the levels of this period.

Period I (Microlithic)

The only dead body discovered was laid extended on the floor of a hut. On digging it was found overlaid by a subsequent flooring of stones. The general orientation of the dead in the grave was north-west to south-east, the head being towards the north-west. The grave was devoid of any offering. The excavator found all the skeletal remains, except the vertebral, pelvis and right fibula.[14] This raises some doubt about the exact nature of the burial. It has been claimed as 'extended' but may equally be 'fractional'. The argument of natural decay may not apply in the present example as the particular bones missing are by their very nature extremely hard and remain intact even when all others wither away. (Plate II)

One may still argue in favour of complete inhumation and reject the idea of fractional burial on the ground that the rest of the bones are found *in situ* and in proper anatomical position. At best, it was a case of disturbed burial in which some bones were dislodged from their proper positions and then removed. But such a situation may exist in the case of 'False Extended Burial' also.

Period II (Chalcolithic)

The dead bodies, during this period, were buried in almost the same manner as these were buried during the previous one, i e , on the floors of the habitation and as complete inhumations. They were, however, marked by some important differences also, some were intrinsic while others were cultural. The intrinsic difference lies in the position of the skeletons found. While in pd. I it was 'extended', now in pd. II it changed to 'flexed', as if the dead body was lying in an attitude of sleep at ease, although the bones discovered were very few and it could be a 'false-flexed' burial. Similarly, a vital change occurred in the orientation of the grave. In the earlier period it was roughly west-east, now in one example at least it was east-west, and in others it was south-east to north-west

The cultural differences were, however, reflected in more than one way. The graves were now full of offerings, pots, ornaments, tools weapons, etc., a feature completely absent in the grave of pd. I. The pots, on the whole, have been small to

14. *IAR*, 1967-68, p. 43. cf. Misra, "Bagor ke utkhanan se Mewāra ke Prāgitihāsa par nāyā Prakāsa," *Dharmayug*, dated the 29th June, 5th July and 12th July, 1969. See also his paper, "Evidence for a Chalcolithic culture in South Rajasthan", *Indian Antiquary*, Third Series, vol. IV, Nos. 1-4, 1970, pp. 85-95.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

medium in size. They include oval 'hāṇḍi', deep basins, bowls, shallow dishes and pans and, 'loṭā', like vessels. All of these are basically the pots of eating, drinking and storage, and not cooking. It is quite understandable, since those pots were meant for carrying primarily the food items for the dead. The food items consisted of large pieces of meat, now surviving as bare bones. The pots were arranged singly or in groups. In one example the grave consisted of only one pot, in another example five pots, and in the third example eight pots. In the last example they were grouped in two, each consisting of four pots. The pots of one group were placed on one side of the body and of the other on the other side. In one example a terracotta spindle whorl was also included in the items offered to the dead. In another example the body was laid with a necklace of stone and bone beads still in position. The grave-goods also included five copper objects ; three of them were inverted 'V' shaped arrowheads with two holes near the point of bifurcation, one was a spearhead, and one an awl. Their distribution is significant : in one grave eight earthen pots, two copper arrowheads and a few animal bones were found. In another grave one copper spearhead, one arrowhead, one long awl, four earthen pots, and a necklace of bone and stone beads, lying near the neck region, were discovered. The third grave yielded only one earthen pot. (Plate III)

Period III (Iron Age)

Belonging to this period, only one grave has come to light. The skeleton has been found lying in an extended position. The orientation of the grave was again slightly changed : the body was laid in the north-south direction, the head being towards the north. The grave did not contain any offering but a small square piece of copper has been found lying near the neck region, which might have served as an amulet.

"A make-shift stone-and-brick wall was raised over the grave."[15] It is, however, not at all clear from this brief account whether the wall was intentionally built over the grave and should be considered as a part of the grave-structure. However, personal enquiries from the excavator reveal that the wall had nothing to do with the grave, it was a later construction, and, probably, formed part of a residential structure.

The above details clearly show that with the passage of time the burial custom at Bagor underwent some significant changes. According to the excavator, "These changes might mean only different ways of death or differing social positions of the dead or they might signify that from time to time new ethnic elements were added to

15. Misra, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Flexed burial, Langhnaj

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

the population."[16] The excavator has suggested probably too many alternatives, each different from the other—the first is natural, the second is social, and the third is ethnic. The fact of the matter is that although some changes have been recorded between the burials of one period and the other, all of them are not intrinsic. Basically, through all the periods, the people buried their dead on the floor of the hut and within the habitation. They neither made a pit for the grave nor raised any monument over it. At no time did they use any receptacle for the body. Not only that, it is claimed that all of them are complete inhumations. The changes seen in the position of the body—from extended to flexed, and from flexed to extended again—as well as in its orientation are, no doubt, very significant and do indicate a change in burial practice but that may not be enough to speculate in all the above terms, as has been done. The basic uniformity of and conformity to traditions are equally well-marked and must be understood. These features are to be explained in relation to the developing and changing pattern of the culture-complex of the site which is througout found dominated by the microliths in spite of the fact that with the passage of time their frequency decreases. The habitational and economic patterns registered changes, but they formed part of the organic growth of the culture as a whole in which the foreign elements participated only to a limited degree.

The arrowheads were certainly not indigenous as their typology shows. Similar examples come from the late Helladic period of Greece going back to the middle of the 2nd millennium B.C. They are all found in the graves and, therefore, likely to have belonged to the dead. In fact, all the copper objects formed part of the grave-offerings ; not even one was found in the habitational layers. There is, therefore, not much evidence to show that copper metallurgy was a local affair. The objects probably came as personal items with the people buried. The concept of 'ownership right' is inherent in all the examples. It is, therefore also possible, though not at all certain, since pd. II is now dated 2800 B.C., that some persons came from outside and although, by and large, they followed the custom of the land and buried the dead bodies on the floors of the house still they adhered to their own practice of the home-land i.e., 'flexed' burials in east-west orientation. Anthropological studies of the bones may provide us with more solid data but at present the position is uncertain.

The graves have yielded complete pots. They have, therefore, thrown a new light on the popular pottery types even granting that a few of them, e.g., a narrow-mouthed bottle, could be only 'grave ware.'

---

16. *Ibid.*

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Langhanaj

The site is located about 60 km. from Ahmedabad, in District Mehsana, Gujarat. The region round the village Langhanaj is dotted with wind-borne sand-dunes with blow-outs or hollows created by whirlpools of wind caught between the dunes. Summer rains have been filling them up and turning them into fishing ponds. Their banks offered quite hospitable camping grounds to the Late Stone Stage hunters and fishers. The area was explored and excavated several times, first by Sankalia[17] between 1941 and 1954, followed by Subbarao[18] in 1954. In 1963 Kennedy[19] dug the site once again to cross-check all the data collected earlier.

Marking layers and fixing stratigraphy in the trenches dug into a sand-dune site like Langhanaj, has always been a very difficult task for archaeologists. But roughly marked stratigraphy, cross-checked by the cultural material that the supposed levels yielded, clearly repeats the picture presented by Bagor. The lowest level or period I is marked by microliths and a few tiny pot-sherds. The levels of period II have yielded the same material but augmented by more pots, some polished neolithic tools and a copper knife. Period III which started with iron, is beyond the scope of this chapter. Sankalia[20] has classified all the levels in the following three periods with their approximate dates :

Pd. I. Before *circa* 2500 B.C. Although, he has not categorically stated as to how much 'before'; he has nevertheless quoted circumstantial evidence which places the beginning of this period in the 4th millennium B.C. It is comparable to pd. I of Bagor datable to 3800 B C. by C^{14} method.

Pd. II. *Circa* 2000 B.C. At Bagor it goes back to 2800 B.C.

Pd. III. *Circa* 100 A.D. May go back to the middle 1st millennium B.C.

Regarding pds. I and II which alone are marked by the concentration of microliths, Kennedy says, "perhaps we are dealing with a transitional civilization from the Mesolithic to the Neolithic."[21] However, the neolithic, rather neolithic-chalcolithic, elements enter into the scene only in pd. II, making it comparable to Bagor pd. II.

The picture that emerges out of the above facts clearly shows that the people were leading more or less a nomadic life : leaving behind wind-breakers of twigs and

17. Sankalia, H.D., *Excavations at Langhanaj : 1944-63*, pt. 1
18. Subbarao, B., *Personality of India*. p. 31.
19. Ehrhardt, Sophie, and Kennedy, K.B.R., *Excavations at Langharaj : 1944-63* pt. II.
20. Sankalia, *op cit.*, pp. 9 and 12
21. Ehrhardt and Kennedy, *op cit.*, p. 2

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

branches of trees, and killing birds, rats, squirrels, wild boar, '*nīlagāya*', hog deer, swamp deer; black buck, mongoose, tortoise, fish, rhinocerors, etc., whose bones have been found in plenty all over the site. Besides hunting and gathering, they had two other occupations: making pottery (black-and-red ware, red ware, grey ware) and fabricating stone tools ; a few copper implements discovered at the site seem to be imports from outside.

Andhario Timbo, the 68 metre high sand-hill near the village Langhanaj, is the actual site of excavations. It has yielded as many as 13 graves at varying depths ranging from ½ metre to 2 metres, and in an area of about 65×35 metres. Most of the bones found are in a semi-mineralized condition. Butzer[22] feels that this happened because of the climatic conditions. The period between 5000 B.C. and 2400 B.C. was rather humid in the Near East, as also in northern India. Encrustation of bones was possible in a soil formed in humic conditions, more so when it was followed by a drier and, probably, warmer climate than that existing at present.

Out of the skeletal remains of 13 persons only those of 3 adults have been found complete and intact, the rest were fragmentary. The completely preserved skeletons are Nos. III, IV and V. They are complete inhumations and come under the category of Flexed burials. The skeleton No. III, belonging to a male of 30-40 years of age, was found "... lying on its back and with crossed forearms on the pelvis, head on the right and pointing towards the north-east."[23] The remaining bones were, however, oriented north-west.

The skeleton No. IV, of a female of 20 years of age was found "... lying on its back with legs drawn close to the body and turned towards the left. It was oriented west-east. Right arm was across the body just below the chest. The left arm lay extended immediately near the body. The legs were, probably, tied up before the burial."[24] The skeleton No. V also represents a complete inhumation of the Flexed type.

The skeletal remains of the remaining 10 persons consisted of either only the skulls (Burial Nos. VI, VII, XI and XIII) or only the bones of the lower jaw (Burial Nos. VIII, IX and X) or bones badly mixed up (Burial No. XII). The bones from Grave Nos. I and II are extremely fragmentary, and it is doubtful if they formed part of the regular burials.[26]

The above details indicate that the burial practices at Langhanaj include not only Flexed burials but also Fractional burials. The situation is, therefore, more or less the same as at Bagor.

22. *Ibid.*, p. 1
23. *Ibid.*, p. 13
24. *Ibid.*, p. 17
25. *Ibid.*, pp. 6-23

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

It appears that underlying the Fractional burials there is an interesting story to tell. The observations made on the condition of the bones unmistakably show that the persons buried were actually the victims of gruesome fight.[26] The skulls show deep cuts across the forehead : clearly, some were smashed with stone while others were cut opened. Kennedy observes that the "... old signs of blows, breaks and splits in the skull show that these people were slain... The blows have been administered from different directions from the front and from behind, and certain signs even indicate that the face was crushed by some blunt weapon (a big stone ?)."[27]

The body was laid on the ground and not in a pit, the same as at Bagor. It was, however, different from the latter in an important respect. At Langhanaj the paved floors and round huts of the Bagor type have not been found. There is nothing by way of house floors except for a couple of paved patches. The burials, however, were not laid even on these patches. It is, therefore, clear that although the funerary practice at Langhanaj was 'habitational,' it was, probably, not on the pattern of 'house burials'.

The Langhanaj burials differ from those at Bagor in one respect more. The burials at the former site do not show changes in different periods of its habitation as has been the case at the latter site.

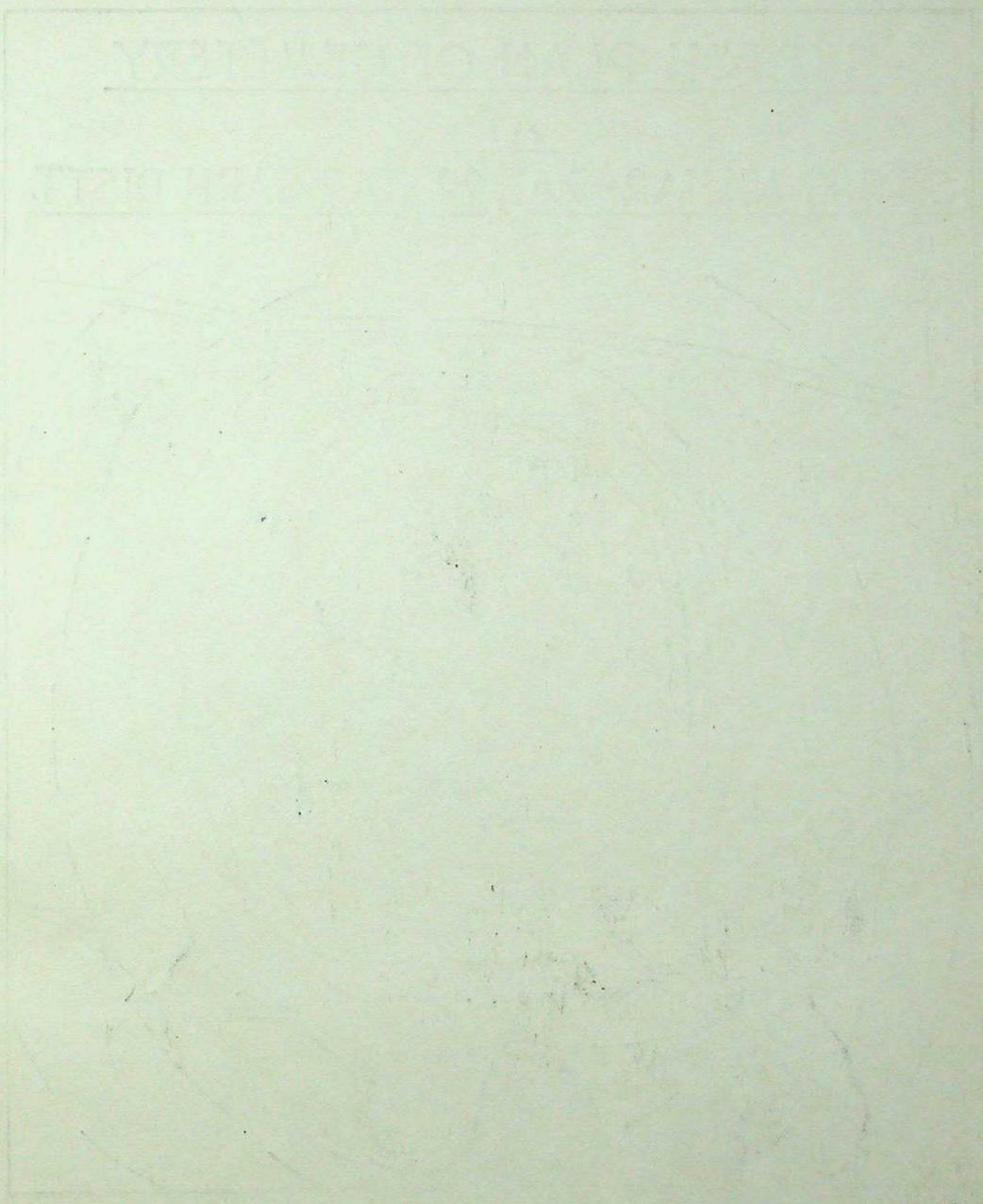
The funerary practices at both the sites differ even in matters of offerings. While at Bagor the pots, copper implements, etc., were found formally arranged round the body, the Langhanaj burials are discovered completely devoid of offerings ; the cultural material as well as the bones, found in the excavated levels formed part of the habitational debris. Some of the bodies were, however, decked with tusk shaped dentalium shell beads which might have been brought from the Arabian coast.

Observations made by Ehrhardt and Kennedy reject all speculations regarding cannibalism, human secrifice, drying the corpse before burying, etc., made in favour of the Langhanaj burials.[28]

The physical types determined by anthropologists[29] show that the population at Langhanaj consisted of Mediterraneans, found wide-spread from Egypt, through Middle Asia to the Indus Valley. Besides these, the population also had the autochthonous type of the Veddids. Both the types, however, show several hybrid elements suggesting cross-breeding. The writers finally observe that "...there were certain genetic features shared by both the Late Stone Age people of Langhanaj and the technologically more advanced peoples of the Harappan area..." Similarities with certain other chalcolithic physical types such as the specimens from Nevasa, confirm this hypothesis

26. Sankalia, *op. cit.*, p 8
27. Ehrhardt and Kennedy, *op. cit.*, p. 3
28. *Ibid.*, pp. 41-2
29. *Ibid.*, p. 47

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

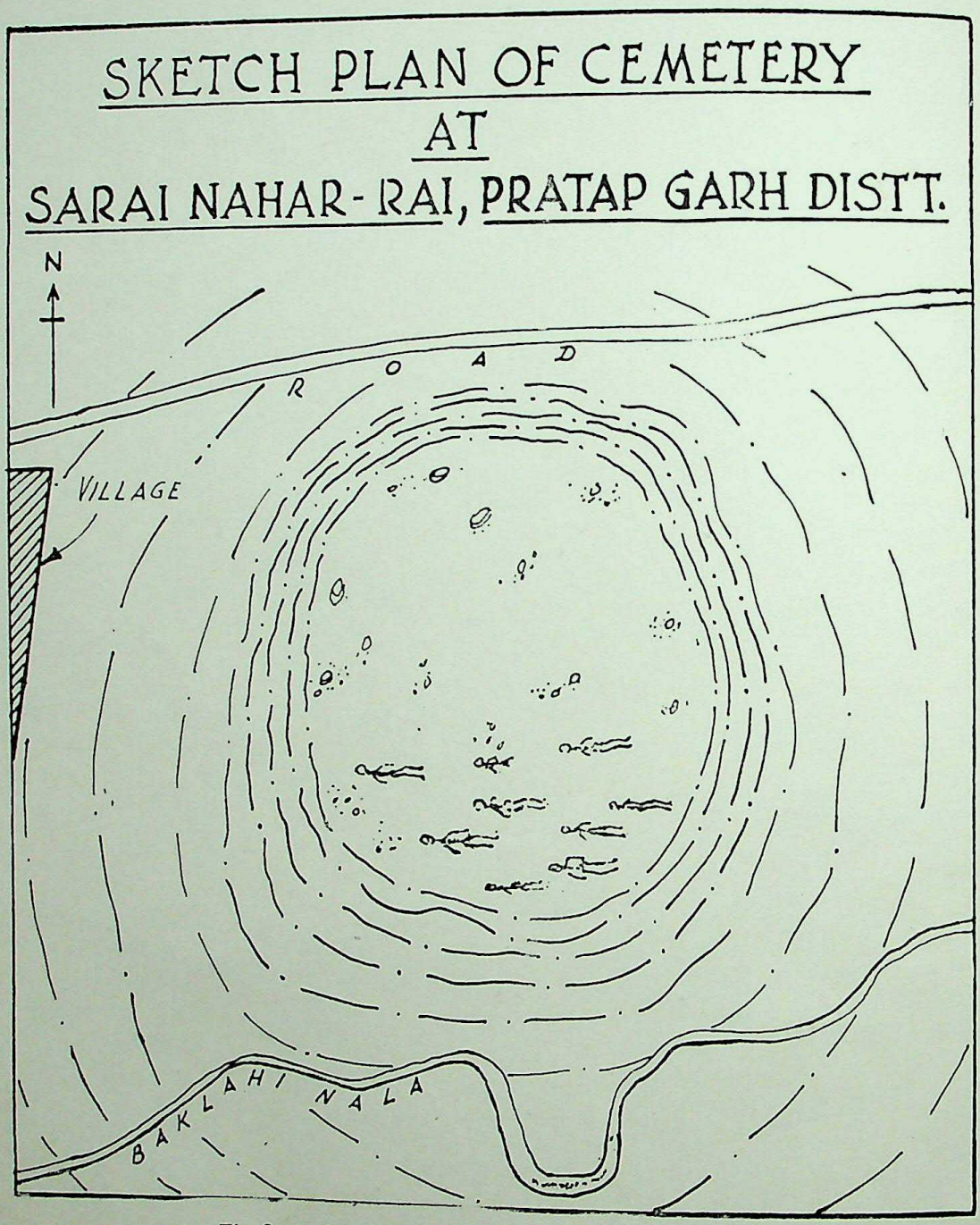


Fig. 3, *the location of the Middle Stone Age cemetery*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

of wide-spread phenotypic patterns of a similar racial type over more than a few centuries."[30]

GANGA BASIN SITES

Sarai Nahar Rai

Recent explorations and excavations in the Ganga-Yamuna Doab by the State Deptt. of Archaeology, U.P. and the University of Allahabad, have brought to light more than a dozen microlithic sites on the banks of the tributaries of the Ganga in the Districts of Allahabad and Pratapgarh. Sarai Nahar, in District Pratapgarh, has yielded about two dozen burials in a cemetary in a context which is Non-pottery Geometric microliths. All of them were extended burials oriented west-east, the heads being towards the west. There were no grave goods.* Further details are not known. The excavated bones are being studied by anthropologists. (Fig. 3)

SUMMARY AND CONCLUSIONS

As in many other countries, the history of India also opens with the well-known chapters of Early and Middle Stone Stages but, unfortunately, their source-material is still confined to stone tools ; the bones of the people who made them have not yet been encountered in any of our explorations and excavations. The position, however, did not remain the same in the following period.

A number of sites belonging to the Late Stone Stage have been explored and excavated in India. They are broadly grouped into three : the Rock-Shelter sites, Sand-Dune sites and Ganga Basin sites. All the three have yielded burials. On C^{14} evidence, some sites may be dated between the 6th and 2nd millennium B.C.[31], although the earliest dated burials come from Bagor whose antiquity goes back only to 3800 B.C. The Rock-shelter sites which have yielded burials are Panchmarhi in M.P. and Baghai-Khor and Lekhahia in U.P. The burials from them show a marked uniformity. The dead body was laid in the rear half of the shelter. The grave-goods in certain examples consisted of microliths placed in groups. In other cases they are devoid of offerings.

The Sand-dune sites which have yielded burials are Bagor and Langhanaj in Rajasthan and Gujarat respectively. The burials at both these places show not only some basic similarity but also some fundamental differences. In both the areas they were 'earth burials within the habitation', although at Bagor at different times different customs were followed—alternating between extended and flexed. At Langhanaj,

---

30. *Ibid.*, p. 73.
*Information kindly supplied by Dr. V. N. Misra, Dr. R. K. Varma and Sri Lakshmi Dutta. The figure has been prepared by Sri Dutta.

31. See Appendix 1 : C^{14} date of Adamgarh Rock Shelter : 7450±130B.P.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

on the other hand, if it was a regular burial the body was placed in a highly flexed position, otherwise the burials were fragmentary. Differences in grave-goods, orientation, etc., have also been recorded.

The Ganga Basin site which has yielded burials is Sarai Nahar Rai. This open-air site has yielded only extended adult burials, about two dozen of them, all arranged in rows in a limited space. The bones dug were completely mineralized since the area is very much calcareous. The microlithic deposit is very flimsy. Since no other Ganga Basin site has yielded any burial, no generalisation can be made.

From the socio-economic point of view, the people were microlith using nomadic hunters and fishermen in areas of 'isolation'. Their time-bracket overlapped with that of the Neolithic and Chalcolithic cultures flourishing in the neighbouring regions of 'comparative isolation' and 'attraction', respectively. Contact between them appeared inevitable, howsoever hesitant and limited it might have been. Copper implements and polished stone tools are the glaring examples of this contact. Further, a set of three copper arrowheads at Bagor is extremely puzzling since their nearest parallel occurs in Greece of the time of the middle of the 2nd millennium B.C.[32] It is probable that they were imports, although at this stage it is not possible to visualize the mechanism of diffusion since C^{14} date of the Neolithic-Chalcolithic Bagor goes back to 2800 B.C. Probably, the apparent similarity (even with the Harappan specimens) is of little use to our present study.

These people are credited with red-ochre mural paintings primarily of animals, such as the mammoth and bison, and secondarily of dancing and propitiating men and women. Some form of magico-religious behaviour of the people is clearly reflected in them. Authorities, however, differ on the question of the authorship of these painting.[33] 'Group rivalry and infighting' is not an abnormal feature of tribal societies, living on a more or less comparable socio-economic level. A roughly similar situation may be visualized at some places in the Late Stone Stage. Apart from these, some other features—economic, religious, social—are also reflected in the Late Stone Stage graves of India.

The extreme poverty of the grave-goods, containing in certain cases only a limited number of microliths, and in other cases a few imported (?) copper implements, again corroborate the evidence gathered from the material found in the habitation. It shows that the economic base in the beginning was only hunting which, at a later time, got occasionally supplemented by imports, mainly from the neighbouring regions.

32. Gupta, S.P., "Arrowheads—Its Technology and History", *JBRS*, vol. XLVII (1961), p. 132. See also, *Ind. Ant.*, IIIrd Series, vol. IV, 1970, pp. 91-94.

33. Gordon, D.H., *Prehistoric Background of Indian Culture*, pp. 98 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The absence of a definite item of worship, either in the rock-shelter paintings of the older strata (if their contemporaneity with the Late Stone Stage people is at all accepted) or in the excavated antiquities, inevitably leads us to believe that the rudiments of an important aspect of religion in India, as probably elsewhere, had emerged from the burial rituals. Whatever were the floating thoughts relating to 'life-after-death', of course, if they were at all there, they found their expression in rituals connected with the funerary customs, and did not 'formaliz' through them.

The social pattern that emerges out of the evidence of burials of the Late Stone Age clearly exhibits two things: firstly, the tribalism, and secondly, the chain relationship among different groups of people.

The presence of a number of mutilated skeletons at Langhanaj, with their skulls broken from all sides and showing unmistakable signs of deep cuts, clearly indicates the tribal nature of the social organization in which damaging infights and battles were of common occurrence. Similarly, the custom of habitation burial, whether it is inside a rock-shelter (e.g., Lekhahia) or on the sandy soil in the open (e.g., Bagor) or within the kitchen midden (e.g., Sarai Nahar Rai), is an unhygenic primitive custom and points to the same direction namely that the social set up of the people was primitive and tribal.

Chain relationship are of two types : the one in which one group is linked with the other through blood-relationship, and the other in which two groups are linked through occasional meetings in war and chase. In the Late Stone Age both the types of relationship seem to have played their part in the diffusion of different traits of life-pattern, whether it is tool making technique or hunting technique or burial practice.

The studies in the Late Stone Stage burials, therefore, throws a revealing light on different aspects of the life of the people of the period. No doubt, the light is dim, extremely dim so to say, but it has, to a great extent, helped in dispelling the fog of darkness that surrounded the preceding periods.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 2

THE CHALCOLITHIC COMMUNITIES OF BALUCHISTAN

The arid hilly tracts of Baluchistan were inhabited by some semi-nomadic peasants more than a millennium before the Harappans erected their fortified towns in the Indus Valley and beyond. They were just emerging out of their Stone-Age ancestory and making use of copper in a limited way. In course of time, they learned the technique of making and using low-grade bronze implements, and it proved to be the turning point in their socio-economic life.

Geographical proximity and physiographical identity between the regions of eastern Iran and western Baluchistan played an important role in shaping the cultural pattern of the ancient Baluchi village folk. The economic pressures and tribal upheavals in Iran often brought the migrating communities to Baluchistan. Economic considerations, also led some of the Indus Valley people to establish trade and cultural contacts with the new settlements. This constant exposure of the land to the peoples from the east and the west never allowed it to develop its own living pattern. It presents a thoroughly disjoined picture of a cultural mosaic laid but never sufficiently cemented. The diversity of component peoples in the cultural conglomerate of Baluchistan is marked, particularly, towards the close of the third and the beginning of the second millennium B.C. Miss Cardi sums up the contemporary socio-economic situation in Baluchistan as follows. :[1]

"The Bronze Age settlements of Baluchistan comprise an assortment of cultures and local wares, and throughout Baluchistan there are signs of widespread disturbances during the second millennium B.C., ... and sites occupied by alien inhabitants." Obviously, the graves built by these people offer the same kind of evidence,

1. Cardi, B. De., "A New Prehistoric Ware from Baluchistan", *Iraq*, vol. XIII (1951), p. 64.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Unfortunately, no grave of the early times has been unearthed so far. Kili Gul Muhammad, hardly 3 kms. from the town of Quetta, is the earliest known village of Baluchistan, going back to 4000-3700 B.C. It has not yielded any burial so far, although the site was occupied for quite sometime as is evident from the thickness of the habitational debris.[2] The sites, which have produced evidence of the disposal of the dead, belong to a slightly later period, roughly co-eval to the Harappan.[3] Traditionally the sites are divided into two broad-based groups : the one occupying the northern regions traversed by the Zhob and Loralai rivers, and the other occupying the southern regions, including the Makran coast. The known burial sites are grouped as follows :

A. **Northern Group** : (i) Periano Ghundai (ii) Moghul Ghundai (iii) Dabar Kot.

B. **Southern Group :** (i) Nal (ii) Kulli (iii) Mehi (iv) Shahi Tump (v) Sutka-gen-dor. Most of these sites were excavated by Sir Aurel Stein, only Nal was dug by Hargreaves.

Periano-Ghundai

The site of Periano Ghundai is situated on the right bank of the Zhob, about 6 km. from Fort Sandeman. It was excavated in 1927. The whole deposit has been divided into Phase I (the lower) and Phase II (the upper).[4]

Some contact between the Harappans and Periano people may be visualized on the basis of the discovery of a few Periano II sherds in the lowest levels of Harappa but the stratigraphic overlap between the two has not yet been established.[5] The burials are likely to belong to Periano phase II, which may be placed around 2500 B.C. It is, of course, based upon a rough estimate of the depths at which the graves were found and recorded in the five trenches dug by Stein.

The graves were found at a depth of 1·3 metres in the trenches on the southern slope of the mound. They were distributed in two different areas : one at the southern end of Trench E and the other in the south-western corner of a room in SW area. The people followed the practice of 'Post-Cremation Urn Burials within habitation.' (Fig. 4)

---

2. Fairservis, W.A., *Excavation in the Quetta Valley*, (New York, 1956)
3. The chronology of the Harappa Culture is now a matter of some controversy. Wheeler had proposed in 1947 the time-bracket of 2500-1500 B.C. on circumstantial grounds. D.P. Agrawal has now modified it to 2300-1750 B.C. on the basis of a dozen of C^{14} dates. See Agrawal's "Harappa Culture : New Evidence for a shorter chronology", *Science*, vol. 143, No. 3609, pp. 950-52.
4. Stein, Aurel, An Archaeological Tour in Waziristan and Northern Baluchistan, *Memoir, ASI* No. 37 (1929), p. 36.
5. Wheeler, R.E.M., "Harappa 1946 : the Defences and Cemetery R. 37" *Anct. Ind.* No. 3 (1947), pp. 58-130.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

According to the excavator, "these finds make it clear that burial of human remains, after burning, was practised by the occupants of the site when their dwellings

CINERARY POTS FOUND IN E. TRENCH
PERIANO-GHUNDAI

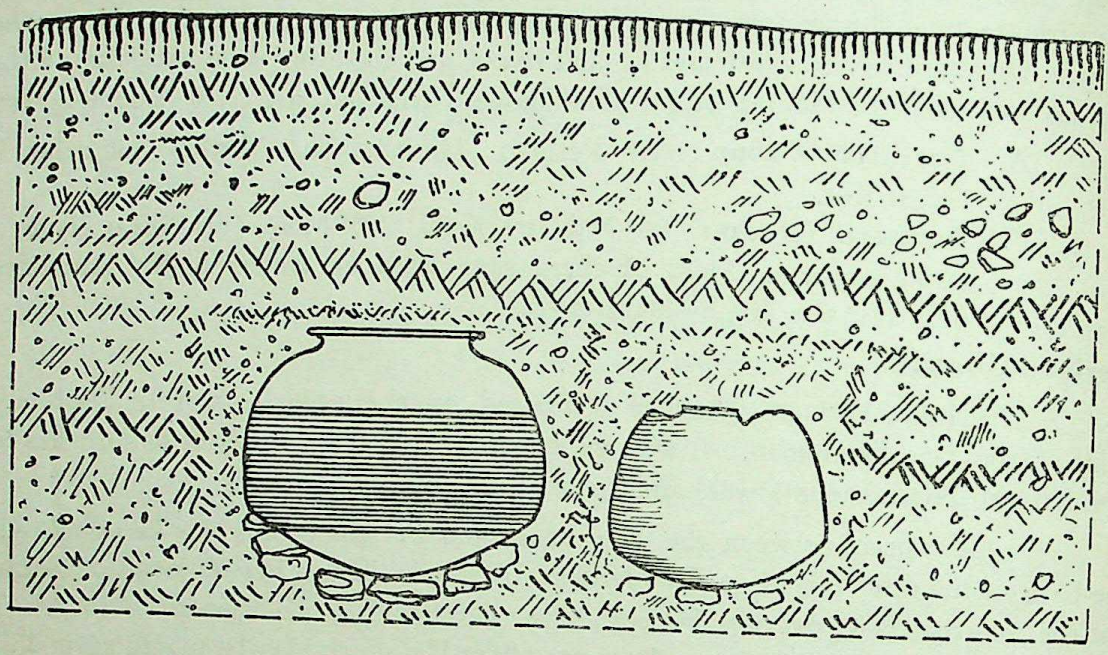


Fig. 4

stood approximately on the level indicated and that the customary position chosen for such deposits was probably intermural." Unfortunately, Stein's report[6] is inadequate, although his overall observation seems to be correct.

---

6. Stein, *op. cit.*, p. 163.

Post-cremation Urn Burials within habitation

Tr. P.E. : The trench was dug deep into the mound exposing habitational layers and the walls of some houses. Four urns containing burnt human bones were found within the habitation.

At the southern end of this trench, 1·3 metres below the foundation of a wall of large sized sun-dried bricks, Stein discovered two pots lying close to each other and containing small fragments of human bones mixed with ashes. The larger of the two pots was 28 cm. high and 35 cm. across the widest point. It was decorated with a self-made ribbing on the outside surface. A third pot with similar contents was found buried in a debris of animal bones and pottery in a cutting towards the east. The fourth pot, beautifully painted and containing human bones and ashes, was located amidst the debris adjoining another wall.

(*Contd. on page 35*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Moghul Ghundai

The site is situated on the left bank of the Zhob, about 14 kms. south-west of Fort Sandeman and less than 2 kms. south of the village Torkhula.[7] The pottery and other antiquities from the site closely resemble those from Periano Ghundai. The exact dating of the site is, however, a matter of controversy. The whole deposit has been divided into three phases—the lower two being equated with Periano I and Periano II, while the upper one was equated with Periano III and dated to circa 1700 B.C. The burials at Moghul Ghundai belong to Periano III period.[8]

Stein had dug two trenches on the mound, one on the northern side and the other on the southern side. Both of them yielded burials which were confined to the depth ranging from 61 cm. to 1·30 metres. The regular mode of the disposal of the

---

(*Contd. from page 34*)

Room P. SW. a. : In this room two pots, one large dish and one medium sized pot, with two small jars, have been found containing bones and ashes. They were, however, found buried at two different places. At 1·6 metres below the extant top of the wall of the room a large painted dish, 46 cm. in diameter, was found 'turned downwards and covering a solid mass of ashes and burned human bones'. At this very level, but slightly away from it, a fairly big pot with similar contents was unearthed. Another large pot tilted downwards over the mouth of another pot containing bones and ashes, was found in the same room. It was painted from outside. A miniature dish, probably used in the ritual of offerings, was found kept inside the pot. It seems to be a double-urn burial (?)

In another room of the SW area a coarsely made medium sized pot containing cremated bones and ashes was discovered. It was buried in the south-western corner of the room under the earth flooring. Two small jars, pear shaped and with foot-stem, were found inside this pot. They were also filled with bones and ashes.

Stein observes : "this examination has furnished strong support for the belief that the remains embeded in this great mound were deposited by dwellers occupying the site during a prolonged but homogenous culture-period. We have seen that walls of sun-dried bricks placed on rough stone foundations served for the habitation of the living. The remains of the dead, after burning the body, were gathered in earthen vessels and a resting place for them was provided within the walls of the dwellings or the closest proximity to them". [Stein, *ibid.*, p. 38]

Human burials within the habitation was a practice commonly followed in Western Asia during the 3rd millennium B.C. and is likely to have influenced the thoughts of the people at this site. [See Appendix IV for parallels in Western Asia.]

7. *Ibid.*, p. 45.
8. Gordon, D.H., *The Prehistoric Background of Indian Culture*, pp. 53-56.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

dead was 'post-cremation urn burials within habitation.'[9]

Dabar Kot

It is one of the most imposing mounds in Baluchistan, rising to a height of about 37 metres from the present ground level. The site is about 35 kms. south of Loralai.[10]

A few trial trenches laid by Stein have revealed that it was a trading post of the Harappans and could not have been established before 2200 B.C. The place seems to have been under occupation for at least five hundred years, ending round about 1700 B.C.[11] The dominant mode of the disposal of the dead at this site also was 'Post-Cremation Urn Burial within habitation.'[12]

---

9. *Post-Cremation Urn Burials within habitation*

A large clay urn, about 25 cm. in diameter at the widest, was found at a depth of 1·30 metres from the top, and close to the foundation of a mud-brick wall. It was decorated with a beautiful painting in black over a red background. The urn contained ashes and calcined human bones including meta-tarsals and skull. The urn also contained offerings in the form of two little jars and a few pot-sherds. A small skull and some long bones were found buried in a room of rubble walls, at a depth of about one metre in the Eastern trench. The skeletal remains were fragmentary.

10. *Ibid.*, p. 58.

11. Gordon, *op. cit.*, p. 52

12. *Post-Cremation Burials*

The burials were found in only one trench at depths ranging between ·75 and 2 metres. They seem to belong to the last phase of the occupation which may be placed between 1900 and 1700 B.C. They were all post-cremation in nature although it is not clear from the published report whether the urns always contained ashes.

Post-Cremation Urn Burials within habitation

Tr. b. : Stein came across a fragmentary pot filled with human bones and ashes at a depth of about ·75 metre from the surface. There was a smaller pot, with almost similar contents, kept inside the burial urn. Both the vessels were of red ware with beautiful geometric paintings of haucherings in black. At the same level, but slightly away from the above finds, was found a painted dish 'tilted over a heap of small bones.' [Stein, *op. cit.* p. 58] In a third example, at a depth of 2 metres, three more pots containing ashes and bone fragments were found. The largest of the three pots was about 40 cm. across, and, therefore, fairly big to contain sufficient number of bones. It was painted below the rim with a diagonally arranged cheque pattern of diamonds filled with haucheres. Another small little jar was lying to the right. On the left was a painted dish covering ashes and small burnt bones. Two large unpainted jars were also found at another place on the same level. They too contained ashes and were 'surrounded by small pieces of burnt bone.' [*Ibid*].

It is clear from the above description that the people were generally entombing the post-cremation bones in urns, dishes and other pots, both painted and plain. The cinerary vessels were buried within the habitation and the procedure was the same as at Periano Ghundai.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Kulli

The site is located midway from Shahi Tump to Nal in District Kalba. The mound is fairly big rising to a height of 10 metres above the present ground-level. The material equipment, now known as 'Kulli Culture', has been found spread over large tracts of central and southern Baluchistan.[13] It covers the time-span of about 600 years, from 2500 B.C. to 1900 B.C. It seems that here the graves belonged to a period between 2100 and 2000 B.C. in view of its location which is in one of the top-levels of the mound, at a depth of only 1·3 metres from the ground level. The dominant mode of burial was 'Flexed Earth Burial within habitation'.[14]

Mehi

The site of Mehi consists of one of the most spectacular mounds in southern Baluchistan. It is about 360 metres long, 330 metres broad and 15 metres high and is located in the Mashkai valley, about 60 kms. north-east of the famous site of Nal. It also belongs to the Kulli culture.[15]

In all, four trenches were laid on the mound out of which only trenches I and III yielded the evidence of burials. These were confined to the upper levels of the mound ranging in depth from 61 cm. to 1·60 metres. Mehi, like Kulli, has also been assigned to 2500-1900 B.C., hence a date around 2000 B.C. can be assigned to the upper levels in which these burials were found located. The popular mode of burial was 'Post-Cremation Urn Burial within cemetery'.[16]

---

13. Stein, *op. cit.*, p. 58.

14. *Flexed Earth Burial within habitation*

Tr. Southern : Stein came across the remains of a house with a room made of walls of sun-dried bricks while excavating a trench on the southern side of the mound. A human skeleton of an adult, found inside the room, was lying in the flexed posture—'the knees were drawn up and the arms bent towards the head'. The orientation of the body was approximately north-south, the skull lying towards the north. Unfortunately, the skull was badly damaged by one of the workmen digging in the trench.

15. *Ibid.*, p. 155.

16. *Post-Cremation Urn Burials within cemetery*

Tr. I. : Only a part of the mound was inhabited around 2000 B.C. ; the burials were laid in one of the deserted parts of the mound. The burial-ground can reasonably be called a 'cemetery' because the habitation area was not used for the burials.

Tr. II : This trench was cut on the western slope of the mound. Stein divided it into a number of sections and described the occurrence of the burials according to the sections.

(*Contd. on page 38*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CREMATION GROUND

The excavations in the trenches on the south-western terrace of the mound exposed an area of about 40 metres x 13 metres, which has been called by Stein as the 'cremation ground' of Mehi. It was found full of burnt earth, ash, broken pottery, stones, fragmentary bones and terracotta figurines. Moreover, the area was devoid of any structure. The so called cremation debris was more than a metre thick.

In Trench I. 8., at a depth of 1·66 metres, Stein found the earth permeated with charred fragments of bones and wood, as well as ash, suggesting that some cremation had taken place on this spot. According to him "there lay six skulls in a heap over calcined bones. The skulls were all small, some looking like those of children ; yet some of the mixed bones cleared were manifestly those of adults. Under one of the small skulls to the left lay a child's copper bracelet."[17]

The details given by Stein are somewhat confusing. Child skulls in a group of six, mixed with adult bones, is a situation which reminds one of the so called 'group

---

(*Contd. from page 37*)

In section 9, the excavator unearthed a number of 'large fragments of calcined human bones covered with a large broken bowl. Amidst these lay a small painted jar containing earth mixed with ashes. [*Ibid.*] In section 8, at a depth of I·3 metres, a large pot with bone fragments and ashes was found buried and kept in position by stones fixed round its foot. [*Ibid.* p. 156]. In section 4, a large urn filled with earth, bone fragments and ashes was unearthed. The urn was covered with an earthen saucer. A small jar with similar bone fragments was found near it. [*Ibid.*]

Tr. III. Here Stein located at a depth of 77 cm. in section 5, a big cinerary urn, 39 cm. high and 46 cm. across the widest point. The urn was held in position by one large and a few small stones placed round it. It contained, as usual, burnt bones and ashes. The urn was buried in a layer apparently formed by a debris containing material from the cremation-ground because this layer contained items such as burnt wood, calcined bones, ash, pot-sherds and a terracotta figurine of the mother-goddess, [*Ibid.*, p. 159] A large cinerary urn, 55 cm., high and 60 cm. broad, was found at a depth of 46 cm., in section 10. Some ash and bones, including a broken skull were discovered at the bottom of this urn. [*Ibid.*, p. 158]

Tr. II. 11: Stein discovered a child's burial at a depth of 30 cm. in this section. The skull and other bones were entombed in an urn. [*Ibid.*]

Tr. III. 6: In this section also the evidence of ceremonial burial lacks clear definition. Charred wood, ash, pots, etc., were found mixed together in the form of a thick deposit at a depth of ·75 metre. A partially burned skull lying broken amidst ashes was found close by. There was a layer of burnt earth and ash, about 30 cm. thick, below this. According to the excavator, 'everything pointed to the body having been cremated at this spot and the cups and other objects having subsequently been placed near what remained of it'. [*Ibid.*, p. 158]

17. *Ibid.*, p. 156

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

burials' at Harappa and which have been completely discarded by Wheeler.[18] The presence of a child's bracelet would not alter the situation since it might only show that the child's body was cremated along with the bracelet on the arm. What is really contested is not the fact of cremation but the proposition of ceremonial burial after cremation.

Burial of cremated remains on the spot of cremation has very little meaning unless it is done in a pit or in an urn, or in a way isolating the ashes of one person from the ashes of the other. Probably, it might be enough to call the area as a cremation-ground and indicate that the offerings and the ashes were left behind to be swept and collected in a corner only at the time of the next cremation.

At Mehi, therefore, cremation was the accepted mode of the disposal of the dead. At times, the post-cremation ashes were collected in urns and buried at a place which may be called 'cemetery'. This place was, however, near the cremation-ground, which in turn was not far away from the habitation. The practice of formal burial was hardly followed in a number of cases ; the ashes were left in the cremation-ground itself. The adults and children were treated alike.

GRAVE-GOODS

The items of grave-offerings discovered at Mehi are varied and impressive, and may be listed as below :

(i) Earthen pots with paintings in chocolate and black colours over a pinkish background.

(ii) A small neatly decorated bone stud or seal found within a group of bones.

(iii) The following copper objects :

(a) a bowl,

(b) a thin disc, probably, a mirror,

(c) one fragmentary and two complete bangles found within a group of bones,

(d) a large mirror,

(e) a decorated hair-pin.

The location, in relation to the ceremonially buried bones, of the last two items is not clear. It may be observed that all the copper objects are toilet objects for women. This may simply indicate that the women were also cremated like men,

---

18. See Chapter III

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

or that they were also favoured with elaborate rituals in which toilet objects were presented.

Nal

Nal is a village in the Jhalwan Division of the old Kalat State in Central Baluchistan. The site, situated near the village, is a little less than 200 kms. north-west of Mohenjodaro. It consists of a number of mounds, the one containing the cemetery is called 'Sohr Damb' and has been excavated by Hargreaves.[19]

Sohr Damb was not a mound inhabited by the Nal people. In fact, it was occupied repeatedly over a long period by the people of the Kulli culture and the Nal people used it only as their burial-ground. Gordon puts the date of the desertion of the site by the Kulli people round about 2150 B.C. and says, "...the arrival of the Zhob people 150 years later either put an end to the use of the site as a burying ground or this had spontaneously ceased sometimes previous to this event."[20] Accordingly, the upper limit of the cemetery can be fixed round about 2000 B.C. Sohr Damb, therefore, belongs to the later phase of the Nal culture-complex although Nal's history started, probably, even before the Harappans.[21]

Hargreaves[22] had divided the mound in seven areas, and named them alphabetically from A to G. Of these, only A and E yielded human remains. Three types of the burial practices have been recorded at the site : (i) Fractional Collective Burials within habitation (ii) Individual Fractional Burial (iii) Flexed Enclosure Burial.

---

19. Hargreaves, H., Excavations in Baluchistan, *Memoir, ASI*, No. 35 (1929).

20. Gordon, *op. cit.*, p. 41.

21. *Ibid.*, p. 22

22. The large scale excavation in area 'A' unearthed the remains of as many as 13 rooms and attached courtyards. The skeletal remains were, however, found only in 5 rooms (Nos. 1,6,7,12 and 13). Except probably one, all the burials were fractional and collective.

Fractional Collective Burials within habitation

Room No. 1. It is the largest of all the rooms, and has yielded in two lower layers, only 7·5 cm. above the floor level. It was six groups of bones labelled as 'H'. Then occurs a sterile layer, followed by the upper layer, about 67 cm. above the floor level. The upper layer contained seven groups of bones labelled as 'C'. [*Ibid.*]

Room No. 6: It yielded two groups of bones and one fragmentary skeleton. The first group contained 7 funerary vessels and bones of 4 adults and 2 children. The second group contained 32 funerary pots and bones of 3 adults, and an infant aged hardly one year. The third burial had the fragmentary bones of an adult female. Hargreaves has described it vividly : a large broken, open bowl contained earth and five smaller vases. In the earth, and between the small vases, were pieces of a rib, part of a pelvic bone and many small bones. These appear to have been placed therein.

(*Contd. on page 41*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

It is amply clear from the excavation report that the people at Nal did not cremate the dead bodies although their several contemporaries in Baluchistan did so. It is equally clear that they simultaneously followed at least four or five types of burial practices. Thus, Complete Inhumation and Fractional Burial were followed at Nal. Two or more subsidiary types of burials are also included under each one of them. Thus, under 'complete inhumation' are Earth Burials (two infant burials in Room no. 13) and Enclosure Burials (Adult Burial no. 2 and Infant Burial in Room no. 7). The Earth Burial was reserved for infants but the Enclosure Burial was accorded to both, the adults and children. The fractional burial included Collective Burial, (two groups of

---

(Contd. from page 40)

The animal bones were found outside and around the large bowl and other vessels. It has also been noted that none of the vessels was large enough to hold a complete skeleton.

Room No. 7: It yielded the burials of two adults and one infant. It is significant to note that while one of the adult burials was fractional, as in other examples, the remaining ones were complete inhumations.

Individual Fractional Burial

Adult Burial No, 1: The grave contained only the skull, some long bones and one vertebra. However, some earthen pots which contained small bones, such as metatarsals and phalanges, were also found near it. They were found mixed with animal bones.

Flexed Enclosure Burial

Adult Burial no. 2: The dead body was laid in a specially constructed enclosure, shaped like a barrel and made of mud bricks set on edge. The skeleton was found lying on the left side; the skull on the east, facing south, and the long bones of arms and legs at different angles. 'The arm similarly bent with the hand to the face. The body was not straight, and the angle made at the knees was about 50 degrees.' [*Ibid.*, p. 27]

According to Hargreaves, the two burials were contemporary since the latter is only 7·5 cm. below the level of the former.

Infant Burial: The dead body was laid in a barrel shaped burial chamber of mud bricks, the sepulchral monument being similar to the Adult Burial no. 2.

The enclosure burials of the type mentioned above appears to be unique. It has some resemblance with those at Harappa and Kalibangan which were 'oblong pit burials with interior lined with mud-bricks. [See Ch. III] However, the difference between the two should not be overlooked : while the former is a free-standing enclosure, the latter is an underground pit.

Room No. 13 : Three infant burials have been found in this room. One of these was a barrel shaped enclosure and the rest were open burials. An impression is created by the details given by the excavator in the case of open burials that all bones, human or animal, found in the excavated trenches, have been included in the list of human burials. In fact, the excavation report is so sketchy on these points that one cannot categorically accept or deny them as regular burials. A doubt may, however, be reasonably expressed in the supposed sepulchral nature of several, so called, '*group burials*' in Rooms 1 and 6, particularly, in the former.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

burials in Room no. 6) and Individual Burial (the Adult Burial no. 1 in Room no. 7). In the fractional burials, by and large, collective and mixed burials found favour ; adults and children were buried together. The burials were always associated with pottery and animal bones. The bones were kept both inside and outside the offering pots.

Shahi Tump

The mound gets its name from the village Tump, situated on the left bank of the Kej, at a distance of 6 kms. from the Turbat Fort in Western Makran. It is about 84 metres long and 8·5 metres high.[23]

A five metre wide trench divided into fourteen sections, was laid across the mound. Between sections (i) and (iv) some walls of loose stones were found. Similarly, between sections (vii) and (viii) a wall of mud-bricks was discovered. The burials were found along the walls of both the types. They have been found in the trenches at different depths. The mound originally belonged to the people of the Kulli culture and the walls in the cemetery area were parts of their houses. Once they deserted the site, some people of the Shahi Tump culture came and occupied a part of it for their habitation and another part for the disposal of their dead bodies. On all counts, the Shahi Tump cemetery cannot be placed before 1800 B.C.[24] The people followed two modes of the disposal of the dead : (i) Post-Cremation Urn Burials, and (ii) Complete Inhumation.[25] (Fig. 5 and 6 respectively)

---

23. Stein, *op. cit.*, p. 93.

24. Gordon, *op. cit.*, p. 47.

25. *Post-Cremation Urn Burials*

Sec. VI. I. The section lies in the south-western corner of the mound. A large painted urn, 35 cm. at the widest, containing fragments of bones of adults, was found at a depth of 1·60 metres. The bones were highly calcined. Mixed with the ashes was a sheep's or goat's jaw, complete with teeth attached with the spinal cord. A few fragments of a glass bangle were also found. [Stein, *op. cit.* p. 93] The burial jar was surrounded by a series of bowls, cups and dishes with designs apparently painted in haste. One of these beautiful dishes held some burnt bones of animals, which were, probably, presented as offerings to the dead.

Complete Inhumation Burials

Stein has reported the earth burial of a badly decayed body of a child from section VIII. It was found surrounded by a number of bowls and jars of small size. The burial of a child with a few painted pots was found in Section XIV also. A disc of copper, about 10 cm. in diameter, lay by the side of the corpse.

(*Contd. on page 43*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The burials at Shahi Tump present a situation analogous to that of Nal, viz., the plurality of burial practices, and the use of a part of the earlier habitational mound

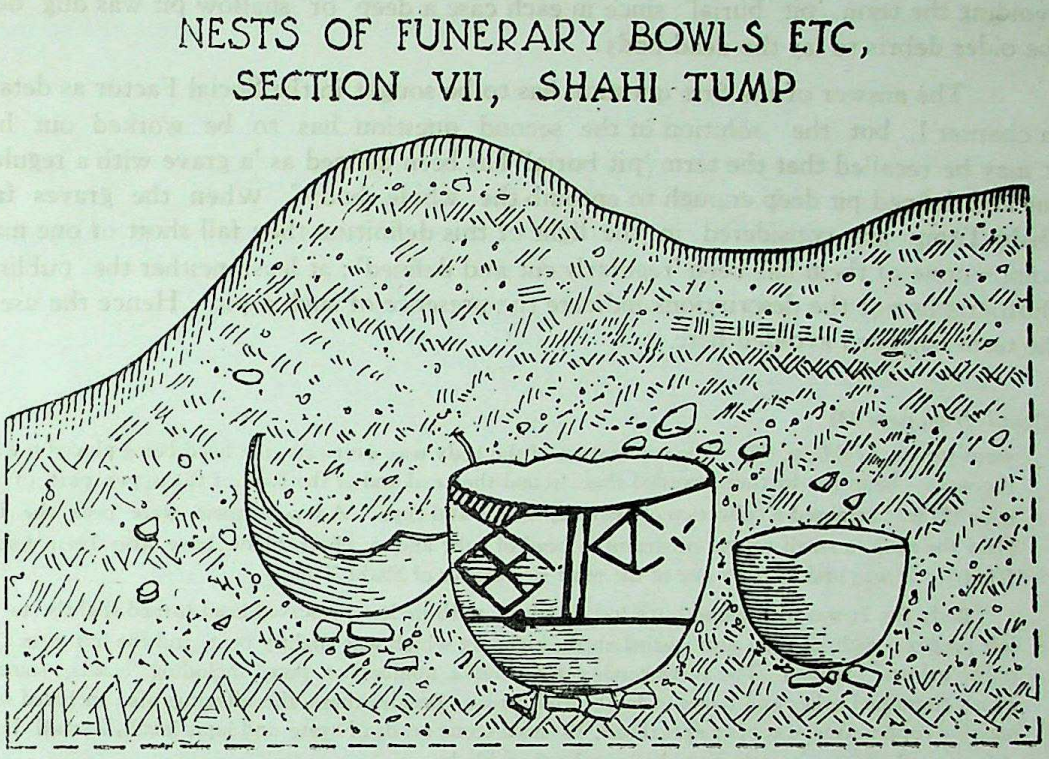


Fig. 5

(*Contd. from page 42*)

Fractional Burial (?)

A poorly preserved human body with the legs bent at the knee and the hands jointly raised towards the chest was also found in section XIV. A small bowl, a patera like cup and a small bronze disc were discovered near the body. 'A large agglomeration of vessels' belonging to 'another and far more elaborate burial,' were also met with at approximately the same level. Unfortunately, Stein has not given any further details of this second burial which might have belonged to a socially distinguished person. Two bodies—called A and B—were located at a depth of 2 metres in the north-western corner of Section VII with only 61 cm. distance between them.

Body A : It was found 'laid on its left side with the head slightly dropped and facing north; the arms laid one above the other and bent so that the joint hands were raised to the level of the chin; the legs with bent bones drawn up as of a person resting on a couch. The body rested on rough water-

(*Contd. on page 44*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

as a cemetery. These two things raise some peculiar problems. The first poses the question relating to the reasons—social or racial ; and the second disputes the logic of avoiding the term 'pit burial' since in each case a deep or shallow pit was dug down the older debris to lay the dead body.

The answer of the first question has to be sought in the Social Factor as detailed in chapter I, but the solution of the second question has to be worked out here. It may be recalled that the term 'pit burial' has been defined as 'a grave with a regularly cut and defined pit deep enough to entomb the whole body.' When the graves from Shahi-Tump are considered in the light of this definition they fall short of one major point—none of them has been 'regularly cut and defined' ; at least, neither the published photographs nor the descriptions indicate the presence of such a pit. Hence the use of the term has been avoided here.

(Contd. from page 43)

worn stones. [*Ibid.*, p. 95] The orientation of the body was west-east, the head being placed towards the west. Stein has further recorded that 'round the head and at the back of the upper part of this male (?) was arranged a collection of beakers, bowls and cups. A few of them were near the feet. Near the neck, a small copper ornament, a bead of ruby and a chert blade have also been found'. [*Ibid.*]. It was undoubtedly one of the most rich graves of Shahi Tump.

Body B : It was also found lying 'on its back, with its less preserved head turned slightly to the left proper ; with its right arm resting on the right leg which was slightly bent, and the left arm close to the breast.' [*Ibid.*] The grave-goods consisted of a number of pots, including bowls, some of which contained ashes and bones of lambs and birds. Besides these, the offerings also included some massive copper axes, a copper spearhead, 19 small stone beads of agate and lapis lazuli, 7 small beads of stone and bone, 3 small stone balls and a flint blade.

It is significant to note that large offering pots contained ashes as well as antiquities which implies the practice of burning the offerings, at least a part of it. The copper tools and weapons as well as precious beads of ornaments buried with the body indicate a decidedly high social status of the dead, prabably achieved because of his valour. One may even go to the extent of suggesting that the person enjoyed the rank of chieftainship.

A single body of an adult was found buried in the crouching position in Section XI. Strangely enough the grave was devoid of any offering pot. The excavator, however, informs that groups of funerary vessels have been found at three different places in this trench. It is noticed that these pots were not placed on the level of the burial, but at different depths ranging from one metre to 2·60 metres. It is, therefore, difficult to say if they were the offering pots of the present burial.

The bodies of adults, both considerably decayed, were discovered in Section XII. They were laid in the flexed position at a depth of nearly 2 metres. The body was accompanied by some badly fired and broken offering pots. Three adult burials laid in east-west orientation, with head towards the east, were unearthed almost near the surface of Section IX. They were, as should be expected from their location, found badly damaged. However, there can be no doubt about their formal nature as burial because a number of offering pots, with raised geometrical designs, have been found near them. One noteworthy item of offerings was a copper seal with raised geometrical design,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Sutka-gen-dor

The site, primarily famous as the western most sea-port of the Harappans, is located on the river Dasht in western Makran. It was excavated by Stein in 1928.

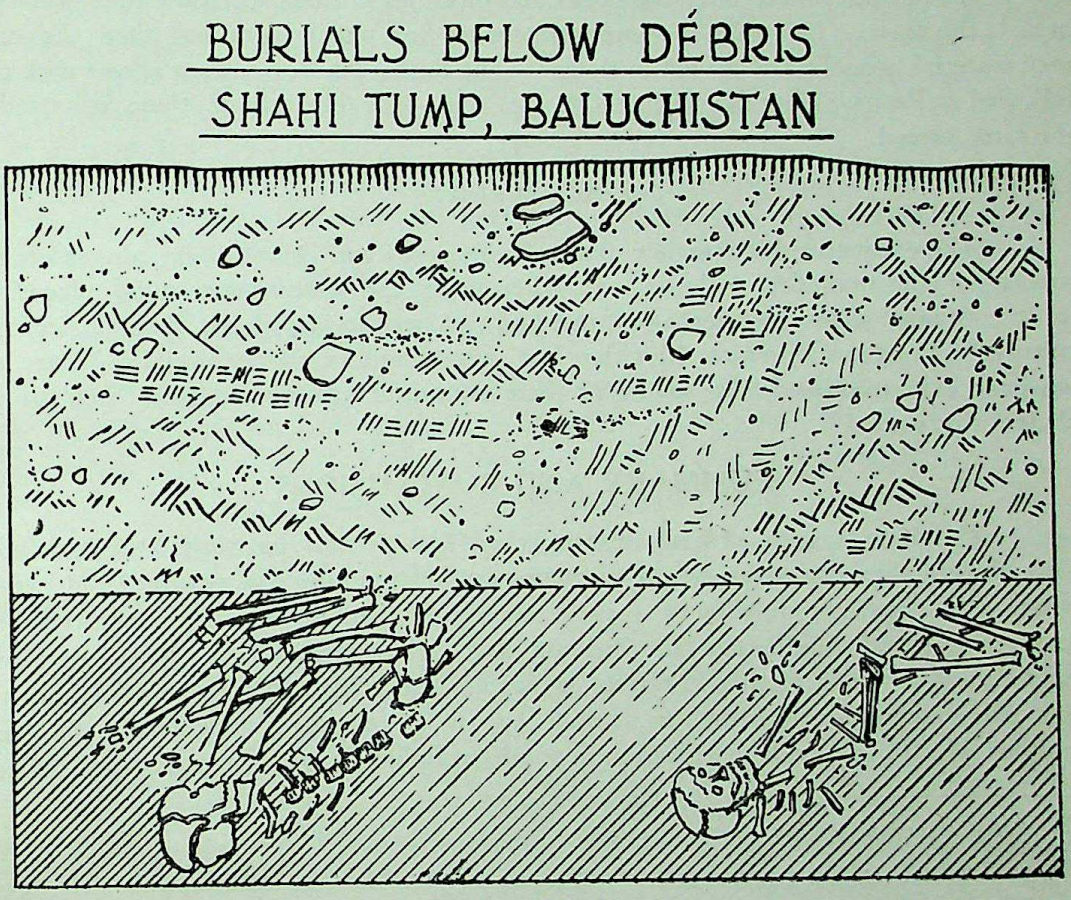


Fig 6

It is, at present, situated in the middle of a bay about 50 kms. from the sea-port of Gwadar.[26] Stratigraphically, the lower levels of the mound go back to the Harappan period and the upper levels belong to the Shahi Tump culture. Tentatively, the upper levels which have yielded the burials may be bracketed between 2200-1900 B.C. The

26. Stein, *op. cit.*, p. 65.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

popular mode of the disposal of the dead here also was 'Post-Cremation Urn Burial within habitation'.[27]

According to Stein the pots or urns were so thin and their contents so heavy that it was not possible to bury the bones and offerings in them when the pots were still outside the grave. Probably, the empty pots were first put in place and then the cinerary material brought and placed in them[28]. The Sutka-gen-dor custom agrees with that followed at Periano Ghundai, Dabar Kot, etc., and probably, all of them belonged to the same period.

SURFACE BURIALS

The excavator discovered a square floor paved with stone slabs, almost on the surface of the mound. A large pot, 61 cm. at the widest, was found placed on it. It contained ashes, fragments of bones and two broken jars of the Zhob Chalcolithic culture.[29] Long back major Mockler had also found a similar burial.[30] Stein has, however, expressed his doubts regarding their supposed antiquity, going back to the chalcolithic period.[31]

SUMMARY AND CONCLUSIONS

The high ranges of Baluchistan stand like a wall between Iran and India. Nevertheless, they had given refuge to many people from both the regions and served as a melting pot for comingling of several strains of people and their cultures from northern Iran and Sind in the late 3rd and early 2nd millennia B. C. Baluchistan presents a very disjoined picture in terms of pottery and other items of material cultures; each culture-complex flourished in its own way in a restricted area except the Kulli complex which had a wide distribution in southern Baluchistan and south eastern Africa.

---

27. *Post-Cremation Urn Burial*

Tr. Su. V : Stein recovered three large pots, embodied in debris dug in this trench. Two of them were found stuck in one another, the inner one measured 58 cm. at the widest. A large number of very small fragments of human bones 'unmistakably calcined' were found kept inside the first pot. The grave offerings consisted of a disc, a bangle of shell and a couple of painted pots, e.g., small footed jars of the Periano Ghundai type and a stand of a 'dish-on-stand' of the Dabar Kot type. The second pot was 75 cm. as its widest and 80 cm. in height. The excavator found ashes and small fragments of calcined human bones inside it. The third pot also contained ashes and burnt bones,

28. *Ibid.*, p. 66.

29. *Ibid.*, p. 159.

30. *Ibid.*, Also refer to Foot Note no. 10 of this Chapter,

31. Stein, *op. cit.*, p. 65.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

However, underlying this diversity of material culture, there existed marked uniformity in matters of disposal of the dead. Out of the eight sites yielding evidence of burial, at least at six places people practised cremation. In five of these, located both in the northern and southern Baluchistan, people buried the post-cremation ashes in urns. In all, six sites exhibited the presence of five different material cultures ; Periano Ghundai and Moghul Ghundai offering one and the same complex, while Mehi, Shahi Tump, Sutka-gen-dor and Dabar Kot yielding different cultural assemblages. This observation clearly shows that the people belonging to different cultures, distributed over a very wide area, may follow one and the same burial practice. One may not, therefore, quite agree with Stein's view that "the distinction in burial customs, as well as in ceramic remains, being perhaps connected, at least partly, with differences of racial origin or of cultural spheres."[32] Unfortunately, much is not known about the racial composition of the inhabitants of these sites ; whatever is known that does not show that degree of divergence the statement of Stein implies.

Apart from Cremation and Complete Inhumation, Fractional Burial was also practised at some of the sites of southern Baluchistan. Complete Inhumation of the Flexed type was more popular a mode of the disposal of dead than the Extended type. At Nal there was a special variety of this type in which a barrel shaped enclosure of mud-bricks was erected. Fractional burial, probably of post-exposure bones, was in vogue at Mehi, Nal and Shahi-Tump; at the former two sites they were exclusively of collective or multiple variety.

The distribution chart at the end shows one more fact about the southern sites. Mehi, Nal and Shahi Tump had several practices followed simultaneously. Sometimes, they were complementary and sometimes opposite. Thus at Mehi, Cremation-ground burial, Collective cremation burial and Post-cremation urn burial were complementary since they all belonged to a single basic mode of the disposal of the dead, viz. cremation. But they were opposite at Nal and Shahi Tump. At the former site complete inhumation and fractional burial and at the latter site Post-cremation urn burial, Flexed burial and Fractional burial were found in vogue. The two are completely opposite practices.

One may easily understand the simultaneous existence of complementary practices, probably in terms of fashions or exigency or group preferences, but not the opposite practices ; their presence should have deeper reasons such as strong social distinctions or social sanctions. This basic uniformity in burial practices, however, does not necessarily imply common eschatelogical beliefs. In fact, in all probability, with different peoples, the beliefs, in one way or the other, were different, as it is today. Further,

32. *Ibid.*, p. 163.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

at all sites neither the post-Cremation bones were buried in one and the same manner nor the placement of burials in relation to the habitation was the same.

In connection with the funerary practices at Mehi, Stein made one interesting observation, "...the custom of leaving the remains of partially burned corpse deposited together with personal relics at the places of cremation differ from that practice (post-cremation urn burial) and may well mark a step towards complete internment such as is found at the later burials on the top of the Shahi Tump mound...."[33]

The comments of Sarkar on these burials are, however, more reasonable. "The main custom is either cremation or burial. Its partial or complete nature appears to be due to the exigencies of circumstances, on which no hard and fast differentiation can be made... The partially burned skeletons may be due to the shortage of fuel or men attending the funeral, such as is often observed in the case of low castes of Bengal, amongst whom the reason behind the partial cremation is often economic."[34] Partial cremation, therefore, cannot be considered as a stage earlier than the complete inhumation. Even the comparative dating of the sites does not vouch for it; the cemetery at Mehi does not seem to be chronologically earlier than the cemetery at Nal, at least in the present state of our knowledge.

Stein has also observed cutting and recutting of burials in different cemeteries in Baluchistan implying on the one hand a prolonged use of the cemeteries and on the other hand slight carelessness on the part of the survivors.

In most of the examples the skeletal remains were kept in a haphazard manner which again reflects the uncalled for hurry on the part of those who buried the bodies or the skeletal remains.

The grave offerings also only rarely present any systematic placement. Except, probably, in the 'enclosure' burials at Nal, the earthen pots, the metal tools and weapons, and stone and shell objects exhibit only a casual manner of placement.

In several examples of the post-exposure (fractional) and post-cremation burials, it is practically impossible to see any recognized system in the arrangement of bones or even in the receptacles of bones. Sometimes the bones are kept in one pot and sometimes they are distributed in several pots ; sometimes they are kept in small or big groups and sometimes they are found distributed in a layer. Similarly, sometimes jars were used to receive the ashes and sometimes only dishes and bowls were used for this purpose.

---

33. *Op, cit.* p. 163.
34. Sarkar, S. S., *Ancient Races of Baluchistan, Punjab and Sind*, (Cal., 1964), pp. 42-43.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Above all, the choice of area for the establishment of the cemeteries has also been rather unhappy. The people did not move a little away from the habitation and occupy a neat virgin soil for this purpose, instead, they usually dug down the old debris, accumulated on the mound they occupied for their settlements, and buried the dead bodies.

Variety and diversity, lack of systematized procedures, comparative poverty and carelessness on the part of the survivors mark the burial practices of the chalcolithic Baluchistan. The picture fits in well the socio-economic framework of the region and time under study.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHART SHOWING THE DISTRIBUTION OF BURIAL TYPES IN CHALCOLITHIC BALUCHISTAN

Burial Type	*Periano Ghundai*	*Moghul Ghundai*	*Dabar Kot*	*Sutka-gen-dor*	*Kulli*	*Mehi*	*Nal*	*Shahi Tump*
Cremation-ground Burial	—	—	—	—	—	+	—	—
Post-Cremation Earth Burial	—	—	+	—	—	—	—	—
Post-Cremation Urn Burial	+	+	÷	+	—	÷	—	+
Flexed Burial	—	—	—	—	+	—	—	—
Flexed Enclosure Burial	—	—	—	—	—	—	+	—
Fractional Burial	—	—	—	—	—	—	—	+
Fractional Collective Burial	—	—	—	—	—	—	+	—
Fractional Individual Burial	—	—	—	—	—	—	+	—
Complete Inhumation	—	—	—	—	—	—	—	+
Collective Cremation Burial	—	—	—	—	+	—	—	—

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 3

THE HARAPPA AND RAVI CULTURES

The year 1921 was epoch making. With the trial excavations at Harappa in the Punjab, the antiquity of urban civilization in India was pushed back to the 3rd millennium B.C.[1] A year later, the excavations at Mohenjodaro in Sind conducted by John Marshall and his associates[2] confirmed the valuable results of the excavations at Harappa. The two taken together placed India on the map of ancient most civilizations of the world.

These discoveries were soon followed by intensive explorations for the Harappan sites. Thus, by 1946 as many as thirty seven sites dotted the map of India.[3] But then came the fateful year of 1947, the country was divided and practically all the important sites, including Harappa and Mohenjodaro, became a part of Pakistan. Fortunately, by then the sites like Rangapur in Gujarat had made it quite clear to us that in the remaining part of India also the Harappa culture had extended over a vast region. The archaeologists of India, therefore, replanned their scheme of explorations and excavations. During the last two decades or so they have successfully discovered more than a hundred sites from Rupar in northern Punjab to Lothal and Bhagatrav in southern Gujarat, from Kalibangan and Tarkhanwala Dera in western Rajasthan to Alamgirpur in western Uttar Pradesh. Thus Harappa culture had crossed the boundaries of the Indus Valley and extended into an area of about 1600 kms. from north to south and

---

1. Short reports published in *Annl. Rept., ASI*, for the years 1920-21 (1923), pp. 15-17, 1923-24 (1926), pp. 52-54 and 1924-25.
2. (i) Marshall, J., *Mohenjodaro and the Indus Civilization.*
   (ii) Mackay, E.J.H., *Further Excavation at Mohenjodaro.*
3. Wheeler, R.E.M., "Harappa 1946....." *Anct. Ind.* no. 3, pp, 129-30. A list of 37 sites known up to 1947 is given there.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

east to west. It overshadowed the claims of Egyptian and Sumerian cultures which did not cover even one third of the area covered by the Harappans.

The Harappa culture represents the Bronze Age in India, marked by smelting and forging of copper and tin. Besides bronze, silver, gold and lead were also used for making important objects, such as utensils, ornaments and seals. Materially, the culture was quite rich. Sufficient agricultural produce is evidenced by huge granaries discovered at Harappa and Mohenjodaro and flourishing trade and commerce is attested by a big dockyard uncovered at Lothal[4] and several small sea-ports found along the Makran Coast. The discovery of at least 30 Harappan seals in Sumer is a pointer in the same direction.[5]

The cultural expanse of the Harappans is marked by a basic uniformity, probably, inspired by regional headquarters such as Mohenjodaro in Sind, Harappa in Punjab, Kalibangan in Rajasthan and Lothal in Gujarat. These were planned almost alike with a high citadel and a lower township. The cultural uniformity of the Harappans is reflected not only in town-planning but also in many other aspects of living, e.g., in pottery shapes, black painted designs, seals and sealings, script, drainage system, and some implements. This uniformity in the material culture was also reflected in some important aspects of the spiritual culture of the people, e.g., the disposal of the dead. However, this 'uniformity' does not preclude the element of 'regional and local variations'. Only seven Harappan sites have yielded the evidence of human burials. Fortunately these sites are located in different regions of the Harappan zone of influence so that we can with reason justify the basic uniformity in burial customs among the Harappans. These sites are as follows :

(i)	Harappa	Punjab
(ii)	Chandigarh	
(iii)	Rupar	
(iv)	Kalibangan	Rajasthan
(v)	Tarkhanwala Dera	
(vi)	Lothal	Gujarat
(vii)	Randal Dadwa	

4. *IAR*, 1958-59, p. 14 See also, Rao, S.R., "New Light on the Indus Civilization.....", *Illustrated London News*, pt. I, Feb. 25, 1961, pp. 302-304; and "Shipping in Ancient India", *ICWTC*, pp. 83 ff.
5. Kramer, S.N., "The Indus Civilization and Dilmun, the Sumerian Paradise Land", *Expedition*, vol. 6, no. 1, (1963) p. 45.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

We have also discussed in this chapter the human remains found at two other Harappan sites, viz., Mohenjodaro and Chanhudaro, as well as the bones found beyond the cemetery at Harappa. These bones were not recovered from regular burials but some people have considered them as 'bones from burials.' We have, therefore, discussed them in brief. We have also included the crematory remains discovered at Tarkhanwala Dera, Rajasthan, because it has been reported in the context of the Harappan burials, although it is a solitary example of its type.

Har appa

The mound of Harappa is situated on the Ravi in District Montgomery, Punjab. It was excavated several times by M.S.Vats,[6] K.N. Shastri[7] and R.E.M. Wheeler.[8] The excavators have marked two different cemeteries at the site, each belonging to a separate culture-complex. One of these, which is contemporary with the Harappa culture, is known as 'Cemetery R 37' since it has been located in an area marked as 'R' and was dug in 1937 by Shastri. The other, belonging to the Ravi Culture, a term coined by D.H. Gordon[9] for a post-Harappan culture-complex, is known as 'Cemetery H'. It is located in an area marked as 'H' and dug by Vats. Wheeler has placed the Harappa culture between 2500 and 1500 B.C. although Agrawal brackets it between 2300 and 1750 B.C. on the basis of a dozen or so C^{14} dates. (See Appendix I)

Human remains discovered at Harappa were, in fact, not confined to these cemeteries; Vats has recorded them in some other areas of the site also, e.g., Area G,D,F and AB. All human remains, however, need not form part of 'burials'. In fact, Wheeler rejects out-rightly the theory that the finds occurring outside the cemeteries are burials because they were either extremely fragmentary or 'bundled up' and 'hurriedly thrown away'.[10] We have, therefore, grouped them separately under sections II and III; Cemetery R 37 has been described in Section I. The Cemetery 'H' will be dealt at the end of the chapter in a separate section since it does not belong to the Harappa culture.

SECTION I

CEMETARY R-37

The cemetery was dug for long by Shastri and Wheeler; the former excavated it from 1937 to 1941 and latter in 1946. Shastri listed 47 burials of which, according to him,

---

6. Vats, M.S., *Excavations at Harappa*, 2 vols.
7. Shastri, K.N., *New Light on the Indus Civilization*, vol. II, pp. 39-61.
8. Wheeler, *op. cit.*, pp. 58-130
9. Gordon, D.H., *Prehistoric Background of Indian Culture*, p. 81;
10. Wheeler, *op. cit.*, p. 83.

CC-0. Panjab Digital Library Collection. Chandigarh.

15 were complete burials, 4 multiple burials and 15 fractional burials ; the rest yielded bones of several individuals in a 'mixed' condition. Wheeler laid bare 10 graves, each containing a single skeleton. Thus a total of 57 burials were dug according to the reports available.[11] The detailed analysis of all the graves excavated so far in the cemetery shows that 'in 18 cases earlier burials had been cut by the later graves and in 8 cases the latter had again been cut by tertiary. Nevertheless, the cemetery belongs to one and the same general stratum and was evidently in continuous use."[12] The observations made in this section are mainly based upon Wheeler's report because the work of Shastri has not been yet completely and scientifically published.

An average grave in the cemetery measured 3 x 1 to 1·3x·75 metres although individual graves offered marked variations in which the length could go up to 4·5 metres, width 3 metres, and depth 1 metre from the ground-level. The grave-pits were usually wider towards the head than towards the feet, probably, to accommodate larger number of pots than that intended to be placed near the feet. (Plate IV)

Single Extended Pit Burials

The dead body, as a rule, was placed in the grave-pit in an extended manner, although in exceptional cases it was found flexed. The head was occasionally turned sideways. The orientation of the body was north-south, the head being kept towards the north; to be exact, it was within a few degrees of north, between north-west and north-east. In one example, however, Shastri found the head placed towards the south.[13] The grave pits were oblong in shape. The sides were usually left untouched but in a few instances at every site a mud-brick linning has been observed. As a rule, coffins were not

---

11. Gupta, P., Dutta, P.C. and Basu, A., Human Skeletal Remains from Harappa (Calcutta, 1962), *Memoir, Anthp. Surv.Ind.*, no. 9, p. 18. According to Sarkar, Serial nos. 15, 16 and 17 of Gupta et al are H 796, 796A and 796B of Shastri and '...in all probability are a single skeleton...' He further observes that due to the counting of fragments, the number of individuals are 'counted differently and are printed differently, 47, 49 and 61.' At the end he has rightly observed that "this is also indicative of a wholesale mix up of the skeletal remains either in the field or in the laboratory. It is doubtful if there was any fractional burial in Area A. The close burials of the different dead bodies have, probably, led to the assumption of multiple burials for which the evidence is slender."(a)

In contrast to this state of affairs of the 1937-41 results, the evidence recorded by Wheeler of his excavations of 1946 are absolutely clear. Thus, out of the 10 graves dug, 4 yielded complete skeletons, 4 were found disturbed and 2 were not completely uncovered. (b)

(a) Sarkar, S.S., *Ancient Races of Baluchistan, Punjab and Sind*, p. 63.

(b) Wheeler, *op. cit.*, p. 86.

12. Wheeler, *op. cit.*, p. 86.

13. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

used, but at least in one example it has been clearly reported. (Plate V). Some examples of defined graves have also been discovered in which a mud-brick wall of one or two courses demarcated the grave in a rectangular or oblong area.

The grave-goods consisted of plain and painted pots ; contrary to popular belief the former are found in numbers greater than the latter. These could be anywhere between 2 and 40, in a rare example at Kalibangan their number reached 72. The average number of pots in a grave, however, ranged only between 15 and 20. Most of the pottery types were such as occurred in the habitational area, particularly, of the mature phase of the Harappa culture. One of the graves contained a 'lamp with a handle' placed at the feet of the body. It signifies a ritual different from that observed by placing other types of pots in burials ; while the latter might have contained food for the dead, the former could have lighted the path leading to the other world. Usually, more pots were found near the head than near the feet, e.g., in Burial no. 1 of Wheeler's excavations, out of 21 pots, 19 were near the head.[14] Proximity to the feet claimed the next largest number of pots. The rest were placed near the pelvis or below the body.

The grave-goods also included some toilet objects, for instance 12 graves have yielded copper mirrors with handles ; each of them contained one mirror.[15] Some of the graves had mother-of-pearl shells ; one grave had a large spoon made of shell and another grave contained an antimony stick.[16]

Some of the bodies were placed bedecked with personal ornaments. During the excavations of 1946, Wheeler found a copper finger-ring in proper placement.[17] Shastri had earlier discovered one necklace of steatite beads on each of the two skeletons.[18] Similarly, on two other skeletons, ankle ornaments of paste beads were locatad. An ear-ring of thin copper wire was recovered from one example. Apart from these, the Harappan graves have commonly yielded shell bangles and beads of steatite and paste.[19] In some examples, even chert blades were found placed near the skeletons.[20] The graves have also yielded decayed bones of animals and fowls.[21] It is probable that these are the remains of meat items offered to the dead.

---

14. *Ibid.*
15. *Ibid.*
16. *Ibid.*
17. *Ibid.*
18. *Ibid.*
19. *Ibid.*
20. *Ibid.*
21. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The above list of offerings is quite impressive, although it is fairly poor when seen in the context of overall richness of the culture-complex. Probably, more gold, silver, copper and precious stones have come from the habitational layers than from the graves, a fact which distinguishes the Harappan burials from the burials in Egypt and Western Asia.[22]

---

22. *Ibid.*, pp. 86-89:

(i) Burial no. 8 appears to have been covered by a low mound. The grave offerings consisted of a complete skeleton of a sheep or goat found near the pelvic bones. The grave pit of no. 9 had a mud-brick linning. The southern end of the pit was marked by a heaped up mud-brick filling standing up to a height of $\frac{1}{2}$ a metre from the ancient ground level. According to the excavator, 'it indicates that this burial, like no. 8, was marked by a low mound, resembling that of Muslim graves at the present day.'

(ii) Burial no. 5 is an outstanding example of the Harappan burials. The grave-pit was 3·3 x 2·1 x ·75 metres in dimensions. The body was placed extended in an wooden coffin made of 3·75 cm. thick deodar planks for the side-walls and a rose-wood plank for the lid. Although Wheeler has surmised that the body was first treated with some preservatives and then wrapped in a reed-shroud, these could not be confirmed positively by the laboratory tests. [Chowdhury, K.A., Ghosh, S.S., "Plant Remains from Harappa 1946", *Anct. Ind.* no. 7 (1951), p. 13] By way of recalling foreign analogies it may be pointed out that both, the coffin and the reed-shroud, were used in the Sumerian cemeteries of the 3rd millennium B. C. Woolley found them in the Sargonid and pre-Sargonid graves at Ur, and Buxton observed them in the Cemetery 'A' at Kish. [Wheeler, *op. cit*, p.88]

The body, lying extended with face upwards, was bedecked with a plain copper ring in the right middle finger, a shell ring (probably, ear-ring) near the left side of the skull, and two similar rings to the left of the shoulder. One chert blade and one steatite disc-bead completed the list of the grave furniture.

It appears that a chieftain or head priest of the city was buried in this coffin-grave of Harappa because the dead received a special treatment from the survivers. The theory seems plausible in the context of the plan of the city—the presence of a citadel with ritualistic buildings implies the existence of an institution in which chieftainship or head-priesthood plays an important role.

The Cemetery has not yet been fully excavated and future excavations might provide more corroborative evidence. For the present, Woolley's Royal Graves are certainly missing in the Harappan cities.

(iii) The sex ratio worked out on the individuals identified in Cemetery R 37 shows that the female ratio is higher (59·14%) than that of male' (40· 86%). Does it reflect the composition of the population or pattern of life expectancy ? It is difficult to make any categorical statement because this ratio has been worked out on the basis of only a limited number of burials in the cemetery, but the point should be noted for any work in future.

(*Contd. on page 57*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

SECTION II

Fragmentary Bones found outside the Cemetery

Such bones were found by the excavator in the following areas :

(1) Area G

(2) Mound area : Mound nos. AB, F and J

The excavators of Harappa, particularly Vats, have collected a fairly big number of skulls and long bones from the habitational strata or the heaps of refuse.

(*Contd. from page 56*)

(iv) The age determination of the individuals as worked out by Gupta et al is as follows :

(i)	Juvenile (12 years to 19 years)	—	2
(ii)	Adults (male, 20 years and above)	—	38
(iii)	Adults (female, 18 years and above)	—	55
(iv)	Indeterminable	—	13
	Total	—	108

(v) The table below (Gupta et al, *op. cit*, p. 21) clearly indicates that 'with rare exceptions, the majority of them died when they were at the prime of their life, between 25 and 30 years of age.'

Age Group	12-18	18-21	21-25	25-30	30-40	40-50	50-60
MALE	1	—	1	9	2	1	—
FEMALE	1	2	1	10	4	—	1

(vi) On morphological grounds, the skulls from Cemetery R 37 fall into the category of 'Long Headed'. They are further divisible into two groups : A and A1. A is Proto-Australoid (21 skulls : 11 males and 10 females) and A1 is Mediterranean (10 skulls : 3 males and 7 females). The Proto-Australoid, i. e,, the autochthonous physical type, dominated the population.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

In fact, the way they were found lying on the ground or in a pit, scattered or in a bundle, clearly indicates the non-formal and non-ceremonial nature of their disposal.[23]

SECTION III

Post-Cremation urn burials of Bones, Rarely human

[A] Vats has recorded the occurrence of 176 urns, ranging from 32 cm. to nearly 1 metre in height, in different mounds of the site.[24] The contents of the jars are

---

23. Vats, *op. cit.*

Area G :

A tightly packed mass of human skulls (twenty complete and fragments of at least three others) were discovered in a trench at the depth of 1·3 to 2 metres below the ground level. The skulls were intermixed with a number of human long-bones, some animal bones, and pottery of the Harappan types.

These crania represent 9 adult males, 4 adult females and 6 children. The sex of other 4 adults could not be identified. Most of the adults were between 25 to 30 years of age. The children were mostly aged between 4 to 7 years ; only one child was 9-10 years old. It was found on close examination of the skulls that many of them had cut-marks, 'injuries and abrasions from deliberate blows.' It is, therefore, evident that the whole group represents a hasty burial of injured people, probably victims of a war or riot. Sarkar finds it 'difficult to think that at Harappa where the Cemetery shows so much of concern for the dead, human bodies would be thrown into a dump, unless they belonged to some foreign people whose burial customs the Harappan would never follow'.

Mounds [Sarkar, *op. cit.*, p. 55]

AB, F and J

These mounds have yielded the remains of 25 individuals, mostly represented by incomplete and stray bones. They were of 17 adults, 5 children, and 2 infants below 3 years of age. The bones from mounds AB and F have been declared by Guha as 'modern' on the basis of their higher specific gravity. [Vats, *op. cit.*, p.162] The skeletal remains from Mound J were also fragmentary and comparatively fresh, and, probably, do not belong to the Harappans.

24. *Ibid.*, pp. 254-271

Mound AB	— 41
,, D	— 15
,, F	— 120
Total	= 176

Vats has called them as 'post-cremation burials.' It may, however, be pointed out that rarely do they contain any human bone. There were only three jars in which some human bones were found. They are as follows :

(*Contd. on page 59*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

scanty. A few charred human bones have been found in them but they are so few that their occurrence may be attributed to different reasons. In any case, they should not be regarded as belonging to a regular mode of the disposal of the dead, particularly, when a large number of burial jars in the same cemetery have post-exposure bones and not post-cremation bones. Wheeler has summed up the whole situation as follows :

"These curiously named 'burials' consist of large vessels containing smaller vases, bones of small quadrupeds, birds or fish, and frequently a variety of small objects such as beads, bangles, terracotta figurines and chert flakes, sometimes mingled with ashes and charcoal. The urns in question are found at both sites in buildings of all periods. But is only rarely that human bones are found in this class of urns. Indeed of 126 urns of this class at Harappa, only one contained a human bone (worth mentioning), and that too showed no signs of burning."[25]

In fact, the same observation applies to the so called post-cremation urn burials reported by Marshall from Mohenjodaro.[26] Wheeler is right when he says. ".....there is no evidence whatsoever that these have anything to do with human burials."[27]

Chandigarh

The site is within the capital town of the State of Punjab. It was a chance discovery in February, 1970, when the owner of a plot was digging the foundations of a structure.

The salvage excavations conducted by the Department of History, University of Chandigarh, were successful in unearthing five burials from the cemetery. All, except

---

(*Contd. from page 58*)

Mound F

(i) Jar No. 11 — a human tibia
(ii) Jar No. 32 — probably a human tooth
(iii) Jar No. 89 — some long bones and vertebrae, etc. A few of them were charred.

It would, therefore, be inappropriate to call them as 'Post-cremation Urn Burials'.

Vats has also recorded two urns in Stratum 1 of Cemetery H which, according to him, are post-cremation burials. They are :

(i) Jar No. H. 154 b
(ii) Jar No. H. 158 c

25. Wheeler, *op. cit.*, p. 83, foot-note no. 2
26. Marshall, *op. cit.*, vol. I, pp. 86 ff.
27. Wheeler, *op. cit.*, p. 83

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

one, which was a flexed burial, were the usual extended burials of the Harappan type. They were all oriented north-south, except one in which the head was placed towards the south. All graves were full of plain and painted pots. Further details are not available.[28] Chance discovery at the same place in 1970-71 revealed a few more similar burials. (Plate VI)

Mohenjodaro

Mohenjodaro is situated on the Indus in district Larkana, Sind. It has been excavated on different occasions by Marshall,[29] Mackay,[30] Wheeler [31] and Dales.[32] By now, skeletal remains of more than 41 persons have been recorded by these excavators. Out of these, 37 skeletons are termed as 'Massacred type' for they bear deep and rough cut-marks. Besides, they are so oddly placed in relation to the habitational structures that they can never be included into the category of regular burials in the Harappan context. The remaining four do not occur in regular cemeteries and it is doubtful if they were the remains of regular burials. The details of finds[33] are, however, make it clear that none of the skeletons from Mohenjodaro came from a regular grave.

---

28. *Indian Express*, (Delhi), Dated 13.1.70. Also, N.C. Ghosh, "Protohistoric Punjab,", *Conflux*, vol. III (1971) pp. 19-20.
29. Marshall, *op. cit.*
30. Mackay, *op. cit.*
31. Wheeler, R.E.M., *Five Thousand Years of Pakistan.*
32. Dales, F.G., "The Mythical Massacre at Mohenjodaro", *Expedition*, vol. VI, no. 3, pp. 36-43.
33. (a) Marshall, *op. cit.*
    (b) Mackay, *op. cit.*

    (i) Room no. 74 of House V, Sector B, Hr. area; 13 adults and 1 child. These are, probably, of the intermediate period.
    The group was almost huddled up in the room.

    (ii) House III, Hr. area : Incomplete remains of 3 skeletons in a debris. Late period.

    (iii) In a street between two houses in Block 3, VS area : Six skeletons (5 adults and one child) were found covered with loose earth, free from bricks and other debris. Over two of the skeletons animal vertebrae, whose identification has not been given, were found. Late period.

    (iv) In the Deadman's lane, Section A. Hr. area :
    Remains of two individuals were found, one by Hargreaves and the other by Marshall. The former lay on its back diagonally across the lane, and the latter, fragment of a small skull, was found below the floor of a house nearby.

    (v) In the long lane outside House II of Block 10A, DK. area : 9 skeletons (4 adults and 5 children) were lying in various attitudes as may happen in deaths under tragic circumstances. Two elephant tusks were found with the skeletons. A child's skeleton was found with a bangle of copper, an ivory comb and a faience bead. A child's skull shows signs of beheading. An adult's (male) skull shows a large depressed fracture (140x30 mm.). Intermediate period.

(Contd. on page 61)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chanhudaro

The site is situated in District Nawab Shah, Sind. The skull of an adult female, aged 22 to 25 years, was found in a large storage jar at the level of 3·7 metres above datum level. The jar also contained a large conch shell at the "same level as the skull, and beneath a small hoard of copper and bronze implements."[34] Nothing can

---

(*Contd. from page 60*)

(vi) (a) House I, Room 19, Block 7 DK. area :
A fragmentary skull.
(b) North-west corner, Block I, DK. area :
An adult female's bones.
(c) Well Room 42, Block 8A, DK. area :
2 skeletons on staircase leading down into the Well Room.
2 isolated crania in the lane outside the Well Room. Late period.

Dales writes : "Whereas a couple of them definitely seem to represent a slaughter, *in situ*, the bulk of the bones was found in contexts suggesting burials of sloppiest and most irreverent nature." [Dales., *op. cit.*, p. 34 of the reproduced article published first in the *Jr. of Oriental Research*, vol. XXXI 1961-62, pts. I-IV]

Sarkar [Sarkar, *op. cit.*, p. 15 ; Wheeler (1947) gives his opinion on the four slain persons hanging on the stair of a Well-Room as follows : "It can be regarded as almost certain that these skeletal remains date from the latter end of the occupation of Mohenjodaro and are not later intrusions." (*op.cit.*, p. 84). It also shows the same thing : that the above murders need not be associated with the destruction of the town] also feels the same and observes, that these so called burials do not seem to have taken place simultaneously because of the varying depths from which the skeletons came ; those from the tragedy in the Hr. area appear to be latest of all, since the skeletons were found at a depth of ·75 metre below surface, while those from the DK. area seem to be much older since they come from a depth of slightly less than 2 metres. The question of massacre associated with the destruction of the city is, therefore, out of question ; a few violent and group murders seem to be a more plausible explanation.

Sarkar, however, feels that in at least 4 examples there is evidence of regular burials : "Two were floor burials, one a cremation and the other, probably, a case of jar burial similar to that found at Harappa Cemetery H, Stratum I." [Sarkar *op. cit.*, p.18] It is difficult to subscribe to his views because the number of bones in each case is very small.

Regarding the bones mentioned is Serial nos. (ii), (iii) and (iv) Wheeler says : "their significance has been disputed : at any rate, they do not represent methodical burials." [Wheeler, "Harappa 1946...", p. 83].

Regarding the bones from Serial no. (v) Mackay feels that they were "the remains of a family who tried to escape from the city with their belongings at the time of a raid but were stopped and slaughtered by the raiders. One or more of the family may have been ivory workers, and only the tusks for which the raiders had no use were not taken as loot." [Mackay, *op. cit.*, vol. I, p. 117]

On the whole, there is no valid ground to accept any of them as a regular burial.

34. Mackay, E.J.H., *Chanhudaro Excavations* : 1935-36, p. 252

CC-0.Agamnigam Digital Presevation Foundation, Chandigarh

be said categorically regarding the actual purpose of putting the skull in the jar. It does not seem to be an example of a regular burial in view of the evidence collected at other sites.

Kalibangan

The high mound of Kalibangan in District Ganganagar, Rajasthan, rises majestically on the ancient bank of the Ghagghar. The site has brought to light certain features for the first time, viz., (i) a regular mud-brick fortified town of a people of the pre-Harappan times, (ii) Harappan fortification not only along the citadel but also around the lower town, and (iii) an entirely new burial custom practised by the Harappans : a shallow oval pit with a big jar surrounded by small pots.

The site was located in 1948 by A. Ghosh[35] when he was systematically exploring the deserts of the Bikaner region, particularly the dried up course of the Ghagghar and its tributaries. However, for over a decade since then it remained untapped. In 1961-62 once again its potentiality was realized, and it was put to systematic excavations by B.B. Lal and B.K. Thapar.[36] It has already been dug for seven seasons. However, the cemetery was laid bare only in the excavation seasons of 1963-64, 1964-65 and 1968-69.

The cemetery is a flat area in the present day cultivated part of the site. It is located, about 300 metres west-south-west of the citadel mound, on the present flood-plain of the Ghagghar which now receives water only in the rainy season. Annual floods in the months of July and August have already destroyed or even washed away the graves not dug sufficiently deep below the ground. On a rough estimate, the cemetery is likely to contain about five hundred graves.

All the graves belong to the Harappan period ; pre-Harappan cultural material has, so far, not been found in any grave to indicate the existence of any pre-Harappan burial practice. The graves were encountered at different depths. In a few examples their ground-levels also differed which implies a long use of the cemetery. It is, therefore, probable that the burials in the cemetery belong to four or five periods although, at the present state of our knowledge, each one of them cannot be fitted into a full regular sequence. The graves, in only two examples, have been found cutting each other, establishing their own sequence of construction.

Three types of burials are found in the cemetery : (i) Rectangular or Oblong Pits with skeletal remains and offerings, (ii) Rectangular Pits with offerings but no

35. Ghosh, A., "The Rajputana Desert—Its Archaeological Aspect" *Bull. NISI*, no. 1, (1948), pp. 37-42,

36. Published in the form of notes in *IAR* from 1961-62 number to 1968-69 number.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

skeletal remains, and (iii) Round Oval Pits with offerings but no skeletal remains. All the three contain similar pottery and other precious antiquities. It is, however, interesting to note that in spite of their being the manifestations of one and the same culture, each one of them occupied a separate portion of the cemetery, suggesting some sort of segregation among them. Thus, type I burials are generally found concentrated in the eastern portion of the grave-yard, type II in the western portion while type III in the northern portion. However, no rigid boundaries exist between them. Thus, in one case the northern portion of the rectangular pit of type II was found out by the round pit of type III. It has further been observed that within its own area of concentration, each type shows further groupings of 6 to 7 graves each. What does this mean in terms of social set up is difficult to say. An area occupied by a group might indicate a family-corner or a corner reserved for the people of one profession or for some other similar division of the society.

In type I graves, the skeletons have often been found lying nearer the western pit-wall. This, probably, shows that the bier carriers entered into the grave from the eastern side and placed the body by standing inside the pit. The offerings of earthen-pots filled in the empty space between the body and the eastern pit-wall. The evidence is further strengthened by a grave with two earth-cut steps on the eastern side which might have been used by the people for descending in the grave-pits.

On the whole, 37 burial have been dug of which 15 belong to type I, 5 to type II, and 17 to type III. In one example the grave was used twice.[37] Originally, it was a rectangular pit of type II with two landing steps but no skeletal remains ; only pots were kept in the pit. At a later stage, type I people seems to have re-used a part of it for burying their dead with a fresh set of pots.

GRAVES OF TYPE I

Extended Pit Burials

All these graves share some common features : (i) The pits were oblong or rectangular, about 4 metres long and 2 metres broad, the longer axis being north-south. (ii) The bodies were laid on the floor of the pit, or partially over a layer of pots. (iii) The body was oriented north-south, the head being placed towards the north. (iv) The offerings, mostly consisting of pots, were concentrated more around the head than elsewhere just as at other Harappan burial sites. The pots were mostly plain with only a few painted examples. The types included beakers, dishes-on-stand, bowls, round bellied vessels, etc. The painted designs have been mostly in linear bands ; human

37. Lal, B. B. and Thapar, B. K., "Excavations at Kalibangan", *Cultural Forum*, no. 34, July 1967, p. 86.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

figure has been detected only in one example. The evidence in the case of pottery is also in conformity with that from other sites. A copper mirror has been found in one example, while shell, steatite and semi-precious stone ornaments were included in the grave-goods in several other examples.[38] (v) The evidence of trepanning has been detected in a child's grave, the skull bears six circular holes.[39] In another example the skeleton shows marks of burning at four or five places,[40] which could be accidental since it is a single example of its kind at Kalibangan. The pit was found lined with mud bricks in a third example.[41]Some of the features observed during 1964-65 excavations are significant.[42] (Plate VII)

---

38. *IAR*, 1963-64, pp. 38-39.
39. *Ibid.*
40. *IAR*, 1964-65, Unpublished
41. *Ibid.*
42. *Ibid.*

No. 1

(i) In this example the body was found lying on its stomach in prone condition, with its head towards the south, quite contrary to the normal Harappan interment.

(ii) It was laid in a crouching position with both legs and both arms folded.

(iii) It was placed in the northern half of the pit along with seven pots; the southern half of the pit was almost vacant.

No. 2

(i) The grave, a perfect rectangle, measuring 4 x 2 metres, was completely lined with mud-bricks of 40 x 20 x 10 cm. size.

(ii) The outer surface of the brick-lining was plastered by about 2 cm. thick coating of mud.

(iii) The side-walls lean slightly inwards, but were locked together in such a fashion that one end of each projected laterally across the end of the other in clockwise form.

The offering consisted of as many as 72 pots, divided into two groups : (a) a group of 37 pots in the northern part, and (b) a group of 35 pots in the middle part. Group (a) included an attractively painted jar with a lid. The skeleton was found lying in supine posture over the latter group of pottery. [*Ibid.*]

No. 3

The skeleton in this example has given a very good case for the palaeo-pathologists. It shows physical deformity in the left hand. The left radius and ulna were found shorter in length as compared to their right counterparts. A large ring of shell, 6.5 cm. in diameter, was also found near the left ear. It was, probably, used as an ear-ring. [*Ibid.*]

No. 4.

This was a normal burial with only one peculiarity. The skeleton was at a level slightly higher than the pottery deposit.

No. 5

In this example only the upper part of the skeleton was found ; the lower part was, probably, dislocated by a later pit. The grave, otherwise, was quite rich. In addition to pottery, 13 beads of gold, jasper and agate were found inside a goblet.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

GRAVES OF TYPE II

Rectangular and Oblong Pits without skeletal remains

The pits were similar to those of Type I in shape, size and orientation but they have not yielded any bone. The grave-goods generally consisted of earthen pots and pans ; only in one example fragmentary shell bangles and a string of steatite disc beads, besides one of carnelian, have been found.

A close observation of the pit-filling has revealed some interesting features of the grave-construction. The filling displays alternating bands of fine sand and clay. They were overlying the pottery deposit, and in one case even running into it.[43] This indicates that after putting the pots in the pit, the pit was not filled in, or only partially filled in and, therefore, it remained exposed even during the rains. At a later stage, the remaining part of the pit was filled in by human agency with unbaked brick-bats. They are now in the form of cloddy mess of earth. It may, however, be mentioned that similar bands of clay and sand were recorded in the filling of two graves of Type I in which skeletal remains have been found. This case, however, should not be compared with Type II examples, since the two examples of Type I quoted above were found disturbed by the later pits. Obviously, what was the usual practice for one type, was an unusual situation for the other. (Plate VIII)

GRAVES OF TYPE III

Round or Oval Pits with pots, but without skeletal remains

The burials of this type were much shallower than those of the other two types. They were hardly a metre deep ; in fact most of them were only 40 cm. or less in depth. Similarly, they were usually less than 1·50 metres in diameter. Some of them were also oval in shape. In one of these examples the north-south axis was 1·30 metres and the east-west axis was 1·60 metres.

A grave-pit usually contained a big jar in the centre and 4 to 29 pots around it. It may, however, be made clear that the big jar was not found exactly in the centre. In some examples it was slightly towards the north, while in others it was towards the east. Earthen pots were present in all the pits, but beads, shell bangles and steatite objects were found only in a few of them. In one grave a necklace of steatite beads was found. In another, the neck of a pot was decorated with small disc beads of steatite arranged in three rows. The pot-shapes were the same as in other types of burial. (Plate IX)

---

43. *Ibid,*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The occurrence of these varieties of burials has posed some peculiar problems of relative sequence, significance and sociological interpretation.

Sequence

It is difficult to say as to which of these types appeared earlier, the Ist or IInd. However, in the case of 'stepped burial' the phase I pit (i.e., pit without bones) and phase II pit (i.e, pit with the human skeleton) were of the Ist type. While this may be true in one example it is not so evident in other cases. The position with regard to the IIIrd type is similar. A type II burial was found cut by a type III round pit burial, but it is hazardous to generalize anything on the basis of this evidence alone. Similarly, even though the type III burials are shallower in depth than the rest, this alone would not make the whole group younger than the rest. In fact, one would agree with the excavators that "more definitive evidence is necessary to establish the relative priority, if any, of one practice over the other."[44]

Significance

Type I burials were the actual graves since we get human skeletons in them. The same, however, was not true of the remaining types. The type II burials although structurally akin to Type I, are completely devoid of human bones. They were, probably, only 'symbolic burials' or 'memorials' of those who died elsewhere and whose bodies could not be brought home. Type III is much more difficult to explain. This type of burials has been found for the first time in the Harappan context. It, probably, formed part of the extended pit burials. The pots used in the primary stage of rituals were buried in the grave, but the pots used in rituals after the sealing of the grave could not be so inserted. It is possible that the pots used in the post-sealing rituals found a place in the round burials. According to Jacquetta Hawks, a similar custom was prevalent in ancient Egypt.* In any case, they are either 'symbolic' burials or they form part of secondary funerary rituals. B.B. Lal, the excavator, feels that these circular graves with human belongings, but without skeletal remains, were 'token burials in memory of those who passed away elsewhere.'

Sociological bearing

It appears that there were some sociological factors underlying the typological differences. The site was inhabited by three types of people : one living in the citadel ; the second living by its side ; and the third living in the lower town. Those of the first type could be the priests, as is suggested by the ritualistic fire-places ; those of the second type could be the temporal rulers, as is suggested by the discovery of a few

---

44. *Ibid.*

*This information was given to me by Mrs. Hawks during her visit to Kalibangan in 1966.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

big houses ; and those of the third type could be of the commoners as can be gathered from the large number of small houses divided into several blocks. It is possible that this threefold division of the population is reflected in the three types of burials but it is difficult to guess as to which type belonged to which group. The Circular Graves might have belonged to the temporal rulers, the Oblong and Rectangular Pits (without skeletal remains) to the priests, and the rest to the commoners. This is, however, purely conjectural.

Rupar

Rising like a tower on the Sutlaj, the celebrated mound of Rupar marks the hitherto known northern limits of the Harappa culture. The mound originally quite extensive is now partially occupied by the modern township. In particular, the cemetery has been disturbed by the house-building activity. Unfortunately, it was also disturbed in ancient times by the Painted Grey Ware people. Y.D. Sharma, the excavator of the site, has been successful in exposing a part of it[45] in spite of these disturbances.

The cemetery, now a low mound, is situated on the western outskirts of the habitational mound. The distance between the two mounds has been recorded as 53 metres. In 1954-55 a number of graves were dug in the cemetery. The pits, generally oblong in shape, measure about 2·75 x 1 x·75 metres. A rectangular demarcation of the grave by a single course of mud-bricks has been observed only in one case. This demarcation was at the level of the skeleton itself.

The grave-goods consisted of typical Harappan pots, although some of the graves were devoid of pots. Generally, the pots were placed on the level of the dead body, but at least in one example, the dead body was placed on a bed of pots. The placement of the pots was, however, not always the same. The pots were largest in number near the head but they were also found placed at the feet and on both sides of the body. Their number varied between two and twenty-six. The graves were filled with the self-same earth.

Apart from the pots, the grave-goods consisted of faience and shell bangles, a copper ring and some beads. A faience bangle was still on the left wrist of the wearer while a copper ring was on the right middle-finger.[46] Similar arrangement of these ornaments was noticed in some of the Harappan examples.

---

45. *IAR*, 1954-55, p. 9.
46. Sharma, Y.D., "Past Pattern in Living as unfolded by the Excavations at Rupar", *Lalit Kala*, no. 2 (1956), p. 123.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The body was placed in an extended position and the orientation was broadly north-south. To be precise, in most of the examples the head was found tilted slightly towards the north-west and feet towards the south-east. (Plate X)

Unfortunately, the results are not fully published as yet. However, it is gathered that in one case a dog's skeleton was placed below the skeleton of a man. The dog died either in grief on its master's demise, or else it was sacrificed respecting the deadman's right of ownership. A similar example comes from the Neolithic levels of Burzahom, Kashmir Valley.

Lothal

Lothal, located in District Ahmednagar, Gujarat, is now well-known Harappan site for its ancient dock-yard. It has firmly established the fact of flourishing sea-borne trade by the Harappans. Lothal is also unique for its 'Double' or 'Twin' burials, a type not noticed earlier at any other Harappan site.

The site is situated on the Sabarmati, and the river Bhogao is quite near from the site. Lothal is also very near the Gulf of Cambay, hardly 20 kms. in distance ; in fact, 'in ancient times it must have been nearer by at least half the distance.' The cemetery is situated in the north-west corner of the mound. So far only fourteen graves have been excavated by S. R. Rao.[47] All the graves at Lothal are of single extended type except three which are double burials. They belong to the last three of the five phases in which the whole occupation has been divided by the excavator. The custom of Double Burial was in vogue only in phase III, while the practice of Single Extended Pit Burial was prevalent in all the three phases. Some of the burials of the last phase (V) were very much disturbed by the cultivators.[48]

Single Extended Pit Burials

By and large, the grave pits were oblong with the longer axis running north-south. The orientation of the skeletons followed the same axis ; the head was kept towards the north. In one example, however, it was east west ; the head being placed towards the east. In most of the cases the head was tilted towards the east. In one example the head was sufficiently raised.

The grave goods, as usual, consisted of earthen pots. One of the graves, however, also contained a copper ring and a few shell beads. Another grave contained the horns and bones of a goat, probably, of the goat sacrificed on the grave.

47. Short reports appeared in *IAR* volumes from 1957-58 to 1961-62.
48. Rao, S.R., "Further Excavations at Lothal", *Lalit Kala*, no. 11 (1962), p. 29.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In one example the floor of the pit was paved with mud bricks and in another with kankar.

Double Burials

In three graves of phase III instead of one two skeletons have been found. In one grave the two skeletons were lying separately, but in two other examples they were found in the embracing position. The former had one skeleton of an adult male and one of a child. The grave had only a few pots as grave-goods. The sex determination of the buried persons in the latter two graves is disputable. According to one version[49] both are males, while according to another[50] one is a male and the other is a female. One of the Double Burials was demarcated at the floor level by a single course of mud-bricks laid in a rectangular fashion, recalling a similar example at Rupar.

The age of most of the dead persons ranged between 20 and 30 years. This was also true of other Harappan sites. Rao, therefore, says that, '...it is not known how the dead aged more than 30 were disposed of. '

Urn Burials (?)

"Two urns, each containing crushed bones besides goblets and beakers were found in one of the trenches in the habitation area. At another place was encountered a third urn, built into a brick structure and covered by a stone ; this too contained fragmentary bones, together with a carnelian bead."[51]

Are these regular burials ? The photograph published by Rao (Plate VII. B)[52] carries the caption urn-burial with a question mark. Several such urns were reported at Harappa and Mohenjodaro, as mentioned earlier, but they did not contain any human bone. Obviously, they are unlikely to be burials at Lothal also.

Randal Dadwa

The site, situated in central Saurashtra, was only tapped by an exploratory trench, and not much has been published about it. Apart from other things, a single oblong pit burial with the skeleton of an adult, lying in an extended manner, has been discovered. It is similar to the other examples of 'single extended pit burials' existing in several other Harappan sites, except that the skull was found supported on a dressed stone. The site was excavated by P.P. Pandya.[53]

---

49. Sen, D.K., "Ancient Races of India and Pakistan", *Anct. Ind.* nos. 20-21 (1964 and 1965), p. 204.
50. Personal communication with S.R. Rao.
51. Rao, *op. cit.*, p. 29.
52. *IAR*, 1955-56, p.6 (for details)
53. *IAR*, 1958-59, p. 19.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Tarkhanwala Dera

The desolate site is situated in District Ganganagar of Rajasthan. An exploratory trench was laid on the mound by A. Ghosh. "Here on the top of a made-up platform was noticed an oblong standing cremation ground, marked off by flatly-laid mud-bricks, in which there had been at least five cremations. After each cremation, marked by ashes and bits of charred bone (sometimes collected in pits), the ground within the enclosure was levelled by a coating of clay or mud-bricks for the next cremation to take place. That the Harappans cremated at least five of their dead at this place seems established; but the conclusion that extended inhumation was the normal practice of the Harappans need not be prejudiced by this single isolated instance, particularly as in the neighbouring Harappan site of Binjor-3...the existence of a cemetery was suspected in the course of the same exploration,...where a large number of complete Harappan pots were found near the surface."[54] The observations are self-explanatory. The position regarding cremation in the Harappan context has not registered any further change; not a single other site, even remotely similar to it, has come to light during the extensive explorations for the last two decades, both in the neighbourhood of Tarkhanwala Dera and away from it which may have yielded the evidence of cremation. (Plate XI)

RAVI CULTURE : 'CEMETERY H'

The cemetery is situated in a low lying area on the southern foot of the mounds of Harappa, called D and E, through which a modern irrigation channel is flowing in north-south direction. The culture has been tentatively dated between 1800-1300 B.C.

From 1928 to 1934 the cemetery was excavated by Vats.[55] In 1946 a portion of it was re-excavated by Wheeler.[56] The excavations showed that the cemetery had two strata; the Stratum II is lower in stratigraphical position than Stratum I. At least 120 burial jars were recovered from Stratum I, while a series of earth burials comprising corpses, complete or fractional[57], were found in Stratum II.

The Cemetery H is located slightly away from Cemetery R 37. Since for long there has been a controversy regarding the stratigraphic priority of R 37 over Cemetery 'H'. Wheeler, in 1946, decided to settle the issue by planning a long trench of nearly

54. Gupta, *et al*, *op. cit.*, p. 3. See also foot-note no. 14.
55. Vats, *op. cit.*, p. 203.
56. Wheeler, *op. cit.*, p.89.
57. Vats, *op. cit.*, p.54.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

118 metres which connected R 37 with Cemetery H. About the results of the excavations, Wheeler remarks : "...clear stratifications showed that Stratum I of Cemetery H was not only later than R 37 but was subsequent to a deep intervening deposit of pot-sherds and other debris which indicated a considerable alteration of the site between the two cultures. Stratum II of Cemetery H was not re-identified but report and observation combine to show that this also was stratigraphically later than R 37."[58]

Sarkar tried to propose, on the basis of crude depths, that R 37 and Cemetery H (Stratum II) are at the same depth and have the same types of burial. He argued that since no layer of debris is intervening between Stratum I and Stratum II both are contemporary. Thus, according to him, all the three—R 37, Cemetery H Stratum I and Stratum II—are contemporary.[59] In the light of Wheeler's clear observation in the field Sarkar's views cannot be accepted. Gordon also agrees with Wheeler and says that the Cemetery H people were not the immediate successors of Cemetery R 37 people.[60]

The area covered by both the cemeteries is divided by the excavator into four sections : A. B. C. and D. Section A is completely covered by R 37, while the remaining sections occupy Cemetery H.[61]

Wheeler, in his long connecting trench, found only three jar burials of Stratum I—one was at a depth of one metre and the other two were at a depth of 4/5th of a metre.

STRATUM I

This stratum is marked by burial jars, round, ellipsoid or carinated in profile. Their height ranges from 29 cm. to 48 cm. The round ones are plain or painted, but the painted ones are flanged at the neck. The plain jars have their lower portion roughened by "finger tip" or "finger groove" patterns. All burial jars were originally covered either with inverted bowls or vases or lids with handles, or potsherds and bricks. Vats has mentioned 124 jars, while Sarkar has counted them as 136 : 85 from Section B (eastern) and 51 from Section C (western section).[62]

The burial jars can be grouped into two categories : (I) Jars containing bones, and (ii) Jars containing brick-bats, percolated earth, etc., but no bones. (Plate XII)

The bones from the jars are fractional, probably, 'post-exposure' in nature. Some of the bones seem to be of 'post-cremation' type also. In either case they have

58. Wheeler, "Harappa 1946.....", *Anct. Ind.* no. 3 (1947), p. 85.
59. Sarkar, *op. cit.*, p. 49 and 54.
60. Vats, *op. cit.*, p. 232.
61. Vats, *op. cit.*, p. 232.
62. Sarkar, *op. cit.*, p. 57.

CC-0. Agamdham Digital Preservation Foundation, Chandigarh

been only a few in number. It has been determined on the basis of preliminary studies that 35 jars contained the adult bones ; 21 jars had the bones of children, of them 11 were infants ; 6 jars had unidentified bones and the rest had no bones. It shows that more than 40 jars have yielded only brick-bats, percolated earth, etc., but not bones ; they may be simply memorials or ritualistic. (Plate XIII)

The painted jars form a class by themselves. They are bright red in colour and the portray narrative scenes of some mythological stories.

The scenes, divided into panels, include elements like composite human and animal figures, peacocks, hounds, stars, sun, bow-and-arrow, etc. They have been variously interpreted, but the explanation of Vats and Shastri are really exciting since they see in them the journey of the 'soul-man' to heaven in the light of the Hindu mythology.[63]

STRATUM II

Stratum II, i.e., the stratum below the one containing urn burials, and, therefore, slightly earlier in date, has yielded only 'earth burials'. The term 'earth-burial' implies the fact that the dead body was not buried in a regularly dug pit, rather it was kept on the ground and then covered with earth. It is, however, possible that pits were deep enough only to contain the body and, therefore, could not be detected. (Plate XIV)

The earth burials are of two types : (a) Flexed burials, and (b) Extended burials. Flexed burials were only five in number, the rest were Extended burials. In Stratum II, along with the earth burials, a number of earthen pots were found buried as offerings. These were water pots, bowls, dishes-on-stand, plates, saucers, flat covers, flasks, round vases, etc. In a large number of examples they were painted in black colour over an oily red surface. The technique of painting is very characteristic since their edges are blurred. It happened so because the black colour was applied on a slightly wet red coloured slip. This resulted in the 'running off' of the black pigment, as ink runs on a blotting paper. The painted designs included bulls, pipal leaves, stars, geometric designs, etc.

---

63. It has, however, been argued that the Earth Burials are at a lower level than the level of the Jar Burials but this is simply because the earth burials, which are not as protected as the urn burials, are found much more safe at a lower level. (Sarkar, *op, cit.*, p.70). But such an argument is self-contradictory. The earth burials are made on the ground level and not deep down into the earth. It is, therefore, evident that if in the excavations 'earth burials' are found in lower levels than the level of the urn-burials, they are certainly earlier in date.

For the interpretation of the painted panels see Appendix II.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

POPULATION STRUCTURE

The age and sex-wise distribution of the people buried in Cemetery H is quite revealing and may, therefore, be tabulated here.

Stratum	Infants 1-3 yrs.	Child 3-12s yr.	Juvenile 13-19 yrs.	Male above 20	Female above 18	Adult indeterminate	Total
I	20	13	4	11	19	11	78
II	—	2	1	11	8	4	26

This chart also indicates that the majority of the people buried died when they were in the prime of their youth.

The above data also shows that in Stratum I the female population, if such a deduction is permissible, was numerically higher (63.33%) than the male (36.67%). The situation is similar to that existing in Cemetery R 37. In Stratum II, however, the reverse was the case : the male formed 57.89% of the population while the female only 42.10%.

It is not easy to establish the identity of the Cemetery H or the Ravi people. In the past, only some guesses have been made, of which two are important and may be discussed since they have a direct bearing on the burial practices mentioned in the Early Vedic literature.

According to one suggestion the Ravi people, on the whole, and of Stratum II in particular, were not far removed either in time or in physical types, or even in material culture, from the Harappans, since they also buried the dead-body as complete inhumations and their principal pottery types have been basically the same as those of the Harappans, e.g., the dish-on-stand.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The other view is that they are the persons who 'dispossessed the Harappans and that they may be the Vedic Aryans. Childe[64], Wheeler[65] and Gordon[66] subscribe to this view, arguing one way or the other. In fact, the interpretation of the mythological scenes on the Stratum II burial jars in the light of the Vedic mythologies by Vats[67] and Shastri [68] also identifies the people as Aryans. However, whatever has been said on the issue is more subjective than objective. On stratigraphic grounds, a gap between R 37 and Cemetery H is absolutely clear.[69] Whatever this gap may suggest, at least one thing is certain : the Cemetery H people did not directly come into contact with the Harappans. They were not their destroyers. In the absence of iron and horse people may not agree with the identification of these people with the Vedic Aryans. The pottery evidence, particularly the shapes of some of the pots, strengthens the feeling that the Cemetery H people were collateral people of the Harappans, and they might be found overlapping at some places still unexplored.

What is really intriguing with regard to Cemetery H is the complete change in burial custom from Stratum II to Stratum I without any marked change either in pottery shapes or in painted designs or in any other item of the material culture. According to the physical anthropologists[70] the Stratum II population consisted of three physical types : A, A 1, and B 2 : A and A1 are the same types as that met with in Cemetery R 37, i.e., those which formed the Harappan population. B 2, however, is a new type. While A and Al people were 'long-headed', B2 were 'round-headed'. As against this, Stratum I consisted of an entirely new type—A2, in a good number of cases. A and B types of Stratum II also continued to occur. A 2 is 'a small brained, weakly mesocephalic people'.[71] Statistically, therefore, the Stratum II physical types

64. Childe, V. G., *New Light on the most Ancient East*, p. 213. He writes that Cemetery 'H' people may belong to the Aryan intruders.

65. Wheeler, *op. cit*, p. 82. Although Wheeler does not suggest that the Cemetery 'H' people were the Aryans still to him 'Indra stands accused' for the destruction of the Harappan fort. And if Cemetery 'H' people were the direct successors of the Harappans the implicaion is the same as that of the statement of V.G. Childe.

66. Gordon, *op. cit.*, p. 84. "With the later phase of the Ravi people it may be possible to identify the Vedic Aryans, and such an identification was urged by Vats on the strength of the mythological subjects depicted on the burial jars." Vats, however, said so for Stratum I people and not for the people of Stratum II.

67. Vats, *op. cit.*, p. 208.

68. Shastri, *op. cit.* pp. 12-32.

69. Wheeler, *op. cit.*, See pl. XXXIX, facing page 16 of Wheeler's publication.

70. Gupta, *et al*, *op. cit.*, p. 129.

71. *Ibid.*, p. 158.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

still formed two-third of the Stratum I population. This may be the reason for the continuation of the material culture. However, the one-third of the new population seems to have had its own influence, almost decisive, on the death rituals and the philosophy underlying them. The evidence of elaborate mythological paintings on burial jars of Stratum I clearly indicates this new impact on the people represented in the graves. As has been said in the beginning. the pottery of every day life was not disturbed at all; what was really disturbed was the burial custom.

The answer of the problem, therefore, lies in the correct interpretation of the burial-jar paintings. *In case they are Vedic in mythology, the people burial could not be totally non-Vedic ; at least one section was bound to be Vedic.* Possibly, one cannot be more categorical than this at the present state of our knowledge since the interpretation of the panels, the literary data, and the archaeological material and stratigraphy do not corroborate each other as has been sometimes claimed.

SUMMARY AND CONCLUSIONS

With the discovery of the Harappa culture in 1921, the antiquity of the Indian Civilisation was pushed back to at least 4,530 years from now. It at once occupied a place equal to that of the Egyptian and Sumerian cultures. All of them were Bronze. Age city cultures with elaborate town-planning, brisk trade, and large agricultural produce. The gold, silver and semi-precious stones enriched their material equipments The Harappa culture exhibits this richness more or less uniformly, over a very vast area it covers in India and outside.

The cultural uniformity, however, was not confined to the material items, it was reflected even in the spiritual life of the people, particularly in matters relating to the disposal of the dead.

As a rule, the people used to bury the dead body singly in oblong pits dug in a cemetery outside the habitation but quite close to it, often within 200 to 300 metres of distance. The pits when dug more carefully assumed rectangular shapes which could even be demarcated by one of several courses of mud bricks. In rare examples evidence of mud-brick filling was detected. Landing steps were encountered only in two examples. The body was lowered into the pit by reaching it from the eastern side. It was oriented north-south, the head being kept towards the north. In a few examples at Lothal two bodies were laid in an embracing posture. The twin Burials, as they are called, have not been found anywhere else in India in the Harappan context. Cremation has been reported only at one place, Tarkhanwala Dera in Rajasthan ; other references have been rightly discounted by Wheeler. Graves without bones have been found exclusively at Kalibangan in Rajasthan. Kalibangan is also known for circular graves. In a grave of this category a big urn, accompanied by a few small pots, all without

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

bones but containing human belongings, such as shell and copper ornaments, was placed in a round pit. A coffin burial was also encountered in one example at Harappa.

The culture, no doubt, was rich but the Harappan graves were comparatively poorly furnished; they contained only some earthen pots and copper and stone objects. A grave contained 15 to 20 pots on an average, mostly kept towards the head; only a few were distributed near the feet, the pelvic girdle and below the body. The ornaments of metals and stones, wherever found, exhibited such a placement in relation to the body as to make it clear that the bodies were buried with the ornaments on.

The present study shows both a basic uniformity and regional variations in the funerary practices of the Harappans. It is in consonance with the overall fabric of the Harappa-culture. The comparative poverty of the grave-goods, when seen in the context of a rich material life that the Harappans lived is, however, intriguing. It appears that the Harappans had evolved a more subtle and philosophical attitude towards the problem of life and death unlike many of their contemporaries in Western Asia. Proper care was taken to bury the dead body, even necessary ceremonies were performed and the earthen pots used were placed in the graves, but no extraordinary concern was shown to make the grave an item of pomp and show. It was not even made an occasion to bury the treasures, courtiers, wives or servants to serve the master, king or priest as the case might have been; not even their clay dummies are found in the graves. It is, however, also possible that the graves encountered, so far, were, by and large, of the commoners and the upper strata of the society and the 'royal tombs', if they are really there, are missing. This is, of course, only speculative. It is equally possible that the pattern of society here was more democratic, so to say, than it was in many other contemporary societies. This is borne out of the fact that none of the buildings on the citadel of any Harappan site has been identified as palace or temple, belonging to the temporal or the religious head of the state. It, of course, does not mean that there was no ruling authority at these places, but it was, probably, not autocratic. The coffin-grave at Harappa, the grave with as many as 72 pots at Kalibangan, the grave with a bed of earthen pots and pans at Rupar, certainly distinguish themselves from the others and claim a place of greater honour and prestige for the persons buried therein than for the rest. These might have belonged to the ruling authorities, but their character was not the same as that of a pharaoh of Egypt. It might have been some sort of oligarchy, we do not know. Whether within the cemeteries the social gradations of the people were kept or not, is another interesting question often asked. It is not easy to answer it categorically although some guesses may be made. At Kalibangan segregation in burial types within the cemetery has been clearly marked, e.g., the 'circular burials' are exclusively concentrated in

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the northern portion of the grave-yard. We do not know their exact nature but whatever that might have been it is still possible to guess that they were related with a certain section of the population whose separate identity was maintained not only in the burial custom but also in the burial ground. The basis of gradation might have possibly been social or economic or religious, we cannot categorically state.

Child burial has only rarely been reported and, therefore, it is possible that the children were disposed of differently ; they were, probably, cast away in water or exposed to the elements.

If the orientation of the body in the grave had anything to do with the supposed abode of the dead, the Harappan philosophy located it towards the north since the head was generally placed towards that direction.

Women have often been found buried with ornaments and toilet objects, e.g., rings and mirrors of bronze. It is possible to guess, looking at the Harappan repertoire of the bronze objects, that these were, to some extent, luxury items and to 'waste them', so to say, on the graves could not have been that easy ; only very strong emotional feelings or religious dictates could lead people to part with such objects. Death-rituals certainly had deep roots and established beliefs among the Harappans.

The cemeteries, however, were not exclusively meant for the selected few, for it is clear from the statistics of the graves ; at Kalibangan the cemetery has been estimated to contain as many as 500 graves and the one at Harappa not less than double that number. One may still take these numbers as inadequate but it may be remembered that these numbers do not include burials for children, which must have accounted for a large number of examples, as also those which might have been deliberately removed at a later time to make room for the new ones. Moreover, we have made it clear in the Introduction that due to several Social and Natural factors, practically all the Societies in the ancient world simultaneously followed several modes of disposing of their dead. The Harappans do not seem to be an exception to this generalized rule. We may not be able to know all the modes that the Harappans followed.

The Harappa Culture was succeeded, after a short gap, by the Ravi Culture whose remains have been found at Harappa and a few sites in the old Bahawalpur State on the Rajasthan border in Pakistan. A cemetery belonging to it was found at Harappa and is known as 'Cemetery H'. The graves have been found concentrated in two different strata : the upper stratum (I) is marked by Urn Burials of post-exposure fractional bones, and the lower stratum (II) by Earth Burials of bodies laid Extended or Flexed on the floor or in shallow pits covered with earth. Our knowledge about the pottery, the modes of burial and the physical types gathered from the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stratum II burials shows that several elements of the Harappa culture survived even after the Harappans had deserted the site of Harappa.

'Cemetery H' is unique; there is no other site of the Ravi culture with a grave-yard. The conclusions, therefore, lack cross-evidence, an essential feature of archaeological studies.

The earth burials of Stratum II were found laid in all directions, and they display far less care than that the Harappans bestowed on their dead. The accompanying pots, as also the copper and shell objects exhibit an overall poverty. It is more or less in consonance with the living pattern of the people which include shabby houses made of old Harappan bricks.

The population was mixed, a part of it consisted of the displaced Harappans and a part the people of a new wave. They were all settling down. The extended, or even slightly flexed, style of burials was the Harappan way of placing the body but not the completely flexed type. Moreover, the earth burials certainly appeared with the new comers.

Some of the burial jars of Stratum I were painted with portrayals sometimes interpreted in the light of a few Vedic texts concerning the journey of the dead from this world to the other, the heavenly abode of the dead. However, the Vedic references quoted are generally interpreted in the context of cremation and not exposure. The people, therefore, do not seem to be the Vedic Aryans. The cultural equipment of the Aryans probably needs iron, chariots and horses—all the three are conspicuous by their absence. The pictorial representations on the burial jars, however, do show that the cult of the dead was a deeply mythological and highly ritualistic affair with these people. The Aryan theory has one more difficulty. The habitational area does not show either stratigraphically, or in matters of cultural equipment, the emergence of a new people as such. It is, in fact, not easy to visualize the forces behind the sudden change in the burial practices from Stratum II to Stratum I. Probably, Cemetery H is an example which clearly goes against the oft-repeated theory 'one culture, one mode of burial'. The Ravi culture, in the archaeological sense of the term, is one but in matters of disposal of the dead it is divisible in two, one belonging to Stratum II and the other to Stratum I. How to explain it? Once we have already cast our doubt in the theory which connects the Cemetery H people with the Aryans there is hardly any choice left to us but to fall back upon the internal forces that might have brought about the changes in the burial practices. What were these forces? The question is again not easy to answer. The custom of burying the bodies in urns was there in the contemporary cultures of the Deccan but it was totally different from the custom of urn burials in Cemetery H—the former was a primary or secondary burial, within the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

habitation while the latter was a 'secondary burial' in a cemetery. In Sind and Baluchistan urn burials were in vogue, e.g., at Shahi Tump, Periano Ghundai and Moghul Ghundai, but the reports show that they were, by and large, post-cremation burials, and, therefore, different from the Cemetery H post-exposure urn burials. Moreover, there is hardly any tangible evidence to show that the Ravi people had any cultural contacts with the peoples of these outlying areas. In the ultimate analysis, therefore, it has to be attributed to a new philosophy of life and death that might have emerged under the impact of a genius or a group of people who will always remain obscure to us.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 4

NEOLITHIC AND NEOLITHIC-CHALCOLITHIC CULTURES

The period between 2400 B.C. and 1800 B.C. is a landmark in Indian protohistory for several reasons. The Harappans were at their zenith, spreading in all directions both inside and outside India. The chalcolithic village communities of Baluchistan came under a renewed stress of the migrating tribes from northern Iran and a new mosaic of culture-complexes was created there. The indigenous neolithic cultures got a fresh fillip by their contacts with the new copper-producing communities which were emerging under the shadow of the Harappans. For India, it was a phase of great inland cultural changes.[1]

The gamut of cultures during this period is marked by the changes that occurred due to the interaction of forces generated by four groups of people, the Harappans, the Iranians, the neolithic folk and the copper-producing communities. The cultural pattern of India, during the late 3rd and 2nd millennia B.C., therefore, was 'chalcolithic,' to be more precise 'neolithic-chalcolithic', a term coined by Krishnaswami[2] and justified on some cogent grounds, the foremost being the presence of the dominant elements of one (Neolithic) culture-complex into the other (Chalcolithic) at a large number of sites. Broadly speaking, the cultures using predominantly grey wares, polished stone axes and bone tools are categorized as 'neolithic'. and the cultures marked by the

1. Gupta, S. P., "C^{14} Dates Determining the Dynamics of the Indian Chalcolithic Cultures", Paper presented to the Seminar on North Indian Chalcolithic Cultures held at Patna, October, 1969. Unpublished.

2. Krishnaswami, V.D., "The Neolithic Pattern of India", *Anct. Ind.* no. 16 (1960), pp. 27 and 34. The actual term used by him is 'chalcolithic-neolithic' ; Allchin modified it to 'neolithic-chalcolithic'.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

use of black painted red wares, long stone blades and copper-bronze implements are classified as 'chalcolithic'. In a very generalized sense, Karnataka is supposed to be the focal area for the neolithic, and Malwa for the chalcolithic culture. The zone of their effective contact and overlap has been marked on the Bhima in the District Bijapur.[3]

The sites considered here are grouped as follows :

PART I : NEOLITHIC STAGE

Jammu-and-Kashmir

Kashmir Valley :

Burzahom

PART II : NEOLITHIC-CHALCOLITHIC STAGE

Andhra-Karnataka

A. Krishna Valley :

(i) Nagarjunakonda (ii) Palavoy (iii) Piklihal (iv) Tekkalkota (v) Brahmagiri (vi) Terdal (vii) Kovalli, and (viii) Hallur

B. Kaveri Valley :

T. Narsipur

Maharashtra

A. Upper Godavari-Pravara Basin :

(i) Nevasa (ii) Chandoli (iii) Daimabad (iv) Sonegaon, and (v) Inamgaon

B. Tapti Valley :

(i) Bahal-Tekwada and some explored sites in District Dhulia

West-Bengal

Ajaya Valley :

Pandu-Rajar Dhibi

Bihar

Ganga Basin :

(i) Sonepur (ii) Chirand

3. Sundara, A., "Prehistoric Sites in Bijapur District", *JUK*, vol. IV (1968), p. 14.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PART I

NEOLITHIC STAGE

The Neolithic Stage of India is both ill defined and ill documented. From east to west and north to south, polished stone tools, occasionally associated with handmade pottery and bones of domesticated animals, are found at a number of sites, just in the open or below the levels of the first metal using cultures. However, not much is known about the habitation pattern or food habits of the people, or the nature of their agriculture[4].

Krishnaswami[5] has made an integrated study of the neolithic cultures in India. It is now clear that when the Indus Valley Civilization was flourishing in the Punjab, Sind, Rajasthan and Gujarat, in other parts of India people were using microliths and neoliths. On the whole, the neolithic culture of India is to be placed between the middle of the fourth millennium B.C. and the end of the second millennium B.C.

Representing the stage of mixed economy, it was partly pastoral and partly agricultural, although hunting was not yet extinct. For instance, at Burzahom, instead of agriculture, hunting and gathering was the economic base. Pottery making, handmade to start with, and later wheel-turned, was widely practised. The habitational pattern, wherever attested, was rural ; a cluster of huts, cattle-pans and barns marked the hamlets.

Burzahom

The site is situated some 24 kms. north-east of Srinagar in the Kashmir Valley. It is located near the Dal Lake, over a flat hillock of silt and loam facing the Mahadeo peak of the Himalayas. It was first excavated[6] in 1935 and subsequently[7] from 1961 to 1968. The cultural deposit, at places four metres thick, has been divided into three major periods—Neolithic, Megalithic and Early Historical. The 'Megalithic', however, is neolithic in terms of economy and habitational pattern ; only the planting of memorial stones, called 'menhirs', a term often used in the megalithic context, appeared on the scene. The Neolithic (period I) has been divided into two phases—phase I (Lower) is characterized by pit-dwellings (?) and phase II (Upper) by mud-brick houses; the succeeding 'Megalithic' period (period II) is, for all practical purposes, only an extension of phase II of period I.

---

4. Thapar, B. K., "Neolithic Problem in India", *IP* : 1964, pp. 87-88.
5. Krishnaswami, *op. cit.*, pp. 25-64
6. De Terra, H., and Paterson, T.T., *Studies on the Ice Ages in India and Associated Human Cultures*, pp. 233-34.
7. Thapar, *op. cit.*, p. 89.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Period I

The people who occupied the site for the first time during phase I seem to be semi-nomadic hunters and fishermen. This is borne out by the fact that the region abounds in lakes and ponds, and the bone-tools, found mainly consisting of harpoons, pins, arrow-heads and awals. They are supposed to have lived warmly in pits, some of which had landing steps. The pits, as a rule, were roofed, probably by covers of skin supported on reed matting held on wooden posts. Polished stone axes and handmade grey ware pots were used in everyday life.

A change in the habitational pattern occurred in phase II when the whole ground was levelled and the pit-dwellings were abandoned. The phase II people built rectangular houses and platforms of mud-bricks and plastered the floors with mud mixed with red-ochre. A few new types of objects also appeared, such as rectangular polished stone and bone harvesters with two holes along one of the longitudinal sides, copper arrowheads (during their last stage of occupation) and wheel-turned pottery, etc. The bone harvesters and copper arrowheads seem to have been either imported from China[8], or were the local imitations of the Chinese originals. The habitation was stabilized and permanent and the people buried their dead ceremoniously. Interestingly enough, the excavations have yielded the burials even of animals.

Period II

The Neolithic-Megalithic period had the same pattern of living and material equipment as in phase II of the Neolithic period with the addition of megalithic menhirs and some human and animal burials.

Period III

The Early Historical period has not yielded any burial ; only pottery, beads, etc., defined the nature of the culture-complex of this period.

Surprisingly enough, the culture was almost devoid of domesticated animals and plants ; at least so far they have not been reported. One may, therefore, be tempted to declare it as 'mesolithic' rather than neolithic. However, it may be argued that the polished stone harvesters and ring-stones are agricultural implements and wheel-turned pottery and mud-brick houses are indicative of permanent settlements. Both of these features transcend all the known limits of a mesolithic culture.

At Burzahom, in all, 14 burials have been unearthed—of these nine are of human beings and five of animals. Significantly enough, both the types of burials are found laid in close proximity and within the habitation.

8. Gupta, S. P., *IP* : 1964, p. 100. See also his "Neolithic Finds from L[illegible], *Bharati* nos. X-XI (1966-68), pp. 178-89.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

HUMAN BURIALS

Of the human burials, six belong to period I (phase II) and three to period II. Human burials occur inside the houses and below the floors. Such floors are met with at depths ranging from one metre to three metres.

NEOLITHIC (PERIOD I : PHASE II)

Of the total of six burials, which belong to this phase, four are Complete Inhumations and two are Fractional Burials. The Complete Inhumations consist of three Flexed burials and one Extended burial. One of the Flexed burials is that of a child.

Flexed Burials

In one of the Flexed burials the skeleton was found placed in north-east to south-west orientation, the skull being towards the north-east. The dead appears to have been an important person because of the following facts : (1) The skull was completely painted with red-ochre. (2) The skull shows 'seven finished and four unfinished holes in the norma lateralis position on the parietal bone between Bregma and Lambda'.[9] These are the trepanning marks. It has been observed that none of the holes had any sign of healing. The exact significance of trepanning is a matter of some controversy. DeMorgen believes that the trepanning holes are made after the death of the person in order to obtain his fetishes.[10] It is equally probable that trepanning was some sort of a magico-medical operation conducted, successfully or unsuccessfully, during the life time of the deceased, as some of the African tribes are still practising trepanning of this type.[11] Whatever might have been the reason for trepanning, socially the person seems to have enjoyed a very elevated position. If the hazards of the surgical operations were deliberately faced by the community to save the life of a person, the life of that person must have been extremely valued, even if the fetishes were removed and consumed by the survivors, since it would show that the dead man's fetishes were supposed to have carried the outstanding qualities of courage and leadership which the surviving leaders wanted to inherit. (3) The grave was richly furnished with offerings. A choice deer was captured and slain, and the meat was offered to the dead. The flesh has disappeared but the skull and antler pieces have been found buried with the dead at different levels. It appears that the offering of meat items was a repeated process and the filling of the grave involved different stages of funerary rituals. The grave-offerings also included a soapstone, circular disc bead with three linear perforations and 'an animal

---

9. Sharma, A. K., "Neolithic Human Burials from Burzahom, Kashmir", *JOIB*, vol. XVI, no. 3, 1967, p. 240[illegible]
[illegible]nnaswami, *op. cit.*,
10. De M[illegible], H., and Pater[illegible] *Man*, p. 245.
11. Oakley, K. [illegible] and others, *Man* vol. XIX, no. 133, (1955), pp. 93-96,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

jaw completely painted with red ochre'. It appears that these were important items of the offerings and were linked up with the status of the deceased. It is possible to form some idea from the above about the status of the deceased : he might have been the head man or the proto-priest presiding over all rituals and social gatherings.

The other adult flexed burial, with arms raised up to the head and palms covering the face, seems to be that of a woman of some importance since the remains of a beautiful necklace of carnelian beads have been found near the neck region. The body was oriented south-east to north-west.

The third flexed burial, found in an embryonic position, was of a two-year old child. It was found oriented west-east.

Extended Burial

The fourth complete inhumation is an extended burial of an adult. The skull, unfortunately, has been found considerably damaged, probably, 'due to the thrusting of stone pieces inside it'. The body was laid in the south-west to north-east orientation. The sketchy description is, however, not clear on the point whether the 'stone pieces' were responsible for killing the man, or for damaging the skull long after the burial ; probably, the latter explanation is nearer the truth because at Burzahom stones were generally used as the filling material to seal the grave-pits.

Fractional Burial

The post-exposure bones of an adult were found in a burial pit, slightly more than half a metre deep and plastered with lime. The pit was sealed by a floor of yellowish sandy clay. The bones were treated with red ochre. It appears from the way the bones have been found arranged in the grave that a conscious effort was made on the part of the survivors to collect the bones and put them in an order which may indicate that the body was buried in the flexed position. Another unique feature of this burial is the presence of two long conical stones placed over the grave in a position inclining towards the ankles. The grave-goods consisted of a barrel shaped bead. The placing of the conical stones over the grave might mean that the man was greatly revered. Probably, the artificial arrangement of the bones in the flexed position is also a pointer towards it. It may be concluded that this burial was also that of a distinguished person.

The second fractional burial consisted of a pit containing a few post-exposure bones, with the skull kept in the north-east corner. The bones, as usual were treated with red ochre solution.

NEOLITHIC—MEGALITHIC (PERIOD II)

All the three burials hitherto encountered in the excavated levels of this period belonged to the category of the Flexed Burials.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Flexed Burials

The Burial no. 1, of an adult male, was placed on a level higher than that of the rest. The grave-pit was irregular with sides slanting and tapering towards the top. The sides of the pit were lined with stone pieces. The body was placed neither in the flexed nor in the extended position. It was kept in a 'reclining position, resting on its back. It was almost in a sitting-at-ease posture with its head dangling over the right shoulder'. The skeleton found 'was aslant with the skull at a higher level (at a depth of 1·75 metres) and feet at a lower level (at a depth of 2·3 metres) from the top.' The right leg was bent a little and then brought below the left leg at an angle. Near the right foot the pit had a cluster of bigger stones. The grave offerings consisted of five ceremonial earthen pots, three of which were placed to the right and two to the left of the left leg. The grave did not yield any animal bone.[12] The picture presented here again indicates that it was the burial of a socially distinguished person. (Plate XIV).

The second burial, an oval pit plastered with lime, had the body of an adult in a highly flexed position. It was oriented north-west to south-east. Interestingly enough, deep into the pit a dog was found buried. It is quite possible that the man was the hunter-master, and it was the case of a faithful animal being buried near its master. Alternatively, both died of wounds sustained during a hunt and the survivors thought it fit to bury them together.

The head was found severed in the third burial. The excavator called it an 'accidental burial.' The supposed accidental nature of the burial, in the absence of any disturbance in the pit, is hardly justified. He found the skull lying in 'the *norma occipitalis* position towards the leg region.'[13] In a sense, it is a fractional burial. The placement of the head is also significant, and points towards a magico-religious practice.

These flexed burials exhibit certain elements which are new and certain others which are in the continuation of the old ones. The points of departure from the earlier customs include a total absence of red ochre paint on the bones, and the change in orientation of the dead body from the east to the west. The points of continuation include the nature of the grave-pit which was oval and plastered with lime, and the filling of the grave-pits which included pot-sherds, stone pieces, ash, etc.

12. Sharma, *op. cit.*, p. 241-242.
13. *Ibid.*, p. 241.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Animal Bones in Human Burials

The bones of animals, probably of wild species of the dogs, goats and stags, have often been reported from the graves of human beings. These are always disarticulated and, therefore, supposed to have been the remains of the meat items offered inside the graves. The bones have been found on the level on which the human skeletons were found rather slightly above that level.

ANIMAL BURIALS

The burials, which are exclusively of the wild animals are found closely placed with the human burials.[14] Eleven such burials have come to light so far but none of them belongs to phase I of the Neolithic period (i.e , period I). Two burials belong to phase II of the Neolithic period and nine to the Neolithic-Megalithic period (period II). Their general orientation was north-south, the skull being placed towards the north. There was only one exception in which the dead body was placed east-west.

NEOLITHIC (PERIOD I : PHASE II)

Only two burials were dug at this phase ; one was a flexed burial and the other a fractional burial.

Flexed Burial

Only one example of the flexed burial that of a dog has been found. It was of the usual type, and devoid of any offering.

Fractional Collective Burial

The only grave of this type found was in an oval pit (with its longer axis nearly 1·35 metres) dug into the floor of a house. The excavator discovered inside the pit two antlers and the bones of five wild dogs. The dogs were represented by five intact skulls to which were attached portions of vertebral columns in articulated position. Other fragmentary bones recovered from the pit were mostly ribs, limb bones and fragments of pelvic girdles. The grave was devoid of any offering.

It is significant to note that all the loose bones bore fracture marks and they were kept in a rather disorderly manner. Sharma, therefore, feels that the dogs were sacrificed, stripped of their flesh, and then ceremonially buried.[15] One may not however, fully agree with him because the dog is hardly considered 'pious' enough to be 'sacrificed' as such. In any case, the possibility of their burial in a ceremonial manner cannot altogether be ruled out because of the present and past examples. There is

14. Shamra, A. K., "Animal Burials from Burzahom—A Neolithic Settlement in Kashmir", *JOIB*, vol. XVIII, nos. 1 and 2, (1968), p. 42.
15. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

a cult of dog eaters in Queen Charlotte Islands,[16] and dogs are found buried with their masters in Egypt in the Amratian or Naqada I graves[17] as well as in the Heliopolis cemetery.[18]

NEOLITHIC-MEGALITHIC (PERIOD II)

The burials of this period are also Complete Inhumations and Fractional; the former consisting of Single and Collective burials.

Single Flexed Burials

Only two examples of this category of burials were found in the excavations, one was that of an wolf (Plate XV) and the other that of a dog. They were of the usual type and without any grave-goods. However, the carcass of the wolf was found completely charred, and kept in the grave-pit filled with a large quantity of ash. Since the carcass was found completely intact, it is easily surmised that the animal was burnt *in situ*. It is significant to note that this is the only example of cremation at the site.

Double Flexed Burials

All the animals buried in the flexed manner were the dogs, except in two examples where they were wolves. The dead body was buried in the flexed position either on its right or the left; only in one example a dog's skeleton was found lying in the supine position, i.e., resting on its back with legs upwards.

Only four 'double burials' have been excavated, so far. The graves usually contained two bodies of the same species of animal, and in several examples these were two dogs. There was, however, one exception in which an wolf was buried along with a dog. It is interesting and significant to note that in all the examples of 'double burials' the two carcasses were placed at two different levels of the same grave-pit. The oval pit in every case was found containing only bones and earth.

Fractional Collective Burial

Only one example of this category of burials has been discovered. The pit, about 0·30 metre deep, contained the bones of various animals at two different levels. The disarticulated bones of a Himalayan Ibex (*Capra falconeri*) were found on the upper level, nearly 1·90 metres below the surface.

The antlers, and fragmentary bones of the dogs, sheep and goats were found collected in a group without any proper arrangement and kept on the lower levels, nearly 2·20 metres below the ground level.

16. Frazer, J. G., *The Golden Bough*, pt. V, vol. I, p. 20.
17. Quoted by V. Gordon Childe in his *New Light on the Most Ancient East*, p. 54.
18. *Ibid.*, p. 75.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ANIMAL BURIAL : SOME OBSERVATIONS

ANIMAL BURIALS AT NAGARJUNAKONDA

In India, in the neolithic context, a few pits containing animal remains have been found at Nagarjunakonda, District Guntur, Andhra Pradesh. Here, the pit-burials were found slightly away from the habitation, in a separate cemetery opened near the river. In one example, two intact grey ware offering pots (?) were found. It indicates that these pit-burials belonged to the neolithic complex, and were ceremonial.

ANIMAL BURIALS AT DARA-I-KUR

Burzahom and Nagarjunakonda are not the only neolithic sites with animal burials ; there are many sites in Europe and Middle Asia where animal burials have been encountered. However, all of them are not relevant to our study, because they are not necessarily contemporary, nor contiguous with the distribution of the Indian neolithic cultures. There is, however, one exception : the site is known as Dara-i-Kur which is actually a cave close to Baba Darwesh, in Badakhshan, Afghanistan.[19] Ecologically, Badakhshan is out of the general Middle East and close to the South Siberia-Pamir-Kashmir region. The excavations have revealed the existence of four cultural complexes viz., Middle Palaeolithic, Neolithic, Iron Age (Kushan Period) and Islamic. The Neolithic period is dated to 1830±130 B.C. and 1575±125 B.C. "The dates tie nicely with the two dates of Burzahom Neolithic phase—one is 1850±130 B.C. and the other is 1540±110 B.C." The excavator called the neolithic phase of Dara-i-Kur as Goat-Burial Neolithic', since in the levels belonging to this period he found three intentional pit-burials of domesticated goats, two decapitated and one articulated.

The description tallies with that given for some of the Burzahom animal burials which are also both complete and fractional. It is equally significant to note that the excavators found 'underneath Burial no. 3 (goat burial), skull-fragments and several long bones of two or three children and this shows that similar to Burzahom the animal burials here occurred within the habitation and along with the human burials.

PARALLELS BETWEEN HUMAN AND ANIMAL BURIALS AT BURZAHOM

There are several striking parallels between the animal and human burials discovered at Burzahom. For instance, all animal and human burials have been discovered within the habitation. Secondly, the grave-pits in both the cases were perfectly regular and neat : oval in plan (the longer axis being 0·90 metre to 1·05 metres) and narrow on the top but sufficiently wide at the base. The sides of the pit of one of the animals were plastered with lime as was the case with the pits of the human burials. Thirdly, the bones in both the types of the burials were often painted

19. Dupree, Louis, *YBAPS*, (1967) pp. 504-508.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

with red ochre. Finally, the dead animals were disposed of in the form of complete inhumation and fractional burial, in the identical manner as the human beings were disposed of.

Several explanations could be offered for the ceremonial burial of animals. For instance, it might have due to the close bonds between the hunters and the animals which help the former in the hunt. That is why the largest number of burials were of the dogs. This practice clearly reflects the ethos of a hunting community. The burial of wolves might suggest that it was thought expedient to bury the dangerous animals. The poisonous snakes, when killed in the U.P. villages, are immediately either burnt or buried for it is feared that if the fellow snakes see their dead friend they may take revenge by biting human beings. Sharma, however, feels that the animals were 'sacrificed' and they had some totemic relationship with their masters. Such a possibility cannot altogether be ruled out, but more objective proof will be needed to establish it. Sometimes it has also been suggested that while favourite animals are expected to accompany the Master faithfully in the World of the Dead, the wild animals are expected to take rebirth in the next world and once again provide the hunter an easy prey. It has also been said that burying the domesticated animal with the dead was aimed at escaping the death-pollution. In a neolithic society domesticated animals are generally treated as the chief wealth and such they are required to accompany the owner to the other world. The Poles bury a falcon and a dog with the dead. Both the buffalo and dog officiate as psycho-pomp in the death rituals of the primitive.[20]

THE SIGNIFICANCE OF BONES PAINTED WITH RED OCHRE

It is significant to note that the graves containing the painted bones of human beings also yielded the animal bones painted with red ochre. The colour red is generally identified with 'life' and its application is generally expected to 'reanimate' the dead. [21] It was the 'nearest thing to mummification that the Palaeolithic people knew, it was an attempt to make the body again serviceable for its owner's use. E.O. James[22] has considered even the animal horns, tusks and shells, placed with the dead, as 'vitalizing agents to reanimate the body' The interpretation is, of course, somewhat speculative but need not be summarily dismissed.

Extension of these beliefs to the people of Burzahom is a matter on which opinions may differ but looking at the problem in the world context, from the prehistoric times to the present, such a possibility cannot be totally discounted. There

20. *ERE*,. p. 429.
21. James, E.O., *Prehistoric Religion*, *pp.* 22-23,
22. *Ibid.*, p. 243.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

may be several variations, major and minor, so far as the details of the beliefs are concerned, but broadly they may be similar, if not identical.

At the end, it may be suggested that the animals were buried not merely as the food for the dead but as companions to the dead so that they may take 'rebirth' in the other world along with the person they are accompanying. Such an interpretation is based upon the significance of the association of red ochre with the animal bones as detailed above.

SUMMARY AND CONCLUSION

In India, the Neolithic stage seems to have appeared quite late. In the Middle East its initial date goes back to 7000 B.C. and in India this date is not earlier than 3500 B.C. The exact nature of the neolithic culture in India is not very clear at the moment. There are many regional variations, mostly associated with the contemporary chalcolithic cultures. Krishnaswami and Allchin have called these complexes as 'Neolithic-Chalcolithic.' However, the neolithic culture of the Kashmir valley is comparatively free from the Indian chalcolithic traits ; a few exotic items such as the stone reapers and copper arrowheads are well known imports from China or the imitations of Chinese originals and, therefore, do not confuse the issue. Similarly, one black painted red pot, apparently of the pre-Harappan type, seems to be only an import from any of the contemporary Harappan sites. In this part of the chapter, therefore, we have dealt with only Burzahom, the lone excavated site in the Kashmir Valley. The burial sites of the other neolithic regions have been included in the next part—part II *supra*.

Burzahom has yielded the remains of three culture-complexes, the Neolithic, Neolithic-Megalithic and Early Historic. Burials have been discovered in the excavated levels of the first two complexes. It is significant to note that these burials were both of the human beings and the animals and both of them show several common features.

The Neolithic burials belong to the late phase (II) of period I. All of them were laid in lime plastered round pits of 1·17 metres to 2·03 metres in diameter. The pits were dug below the habitational floors and filled in with stone and pottery pieces. The bodies were oriented north-east to south-west or south-east to north-west, the head being kept towards the north-east or south-east, respectively. However, in two burials, one of a child and the other of an adult, the head was placed towards the west. Of the six burials of this period, four were flexed and two were fractional. The skulls and long bones of the fractional burials have often been found painted with red ochre. It is significant to note that one of the adult burials had a skull with eleven holes of trepanning. The grave-offerings include animal bones and beads of paste and carnelian. The two animal burials of this period were of the dogs. One of them was an extended burial of a single dog and the other was a collective fractional burial of five dogs.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Neolithic-Megalithic levels (period II) yielded three flexed burials of human beings. They were oriented east-west unlike those of period I. The bones were also devoid of ochre colour paint, unlike those of period I. The animal burials, nine in number, were of two types : (i) Single Extended, and (ii) Collective Fractional. They were of the dogs, stags, wolves, etc.

Animal burials in the neolithic context have also been found at Nagarjunakonda, Andhra Pradesh, and at Dara-i-Kur, Afghanistan. The custom of painting the bones with red ochre was an age old practice being commonly followed as far back as the Upper Palaeolithic and Mesolithic periods. The custom of burying man and animal together in a single grave as well as separately in one and the same cemetery or in the same habitational area has also been an age-old practice. All these customs appearing in the neolithic context were the survivals of the Old Stone Age customs. In other words, these were the customs of the hunting communities which continued even among the partially settled peoples.[23] Nevertheless the cultural equipment of the two neolithic periods of Burzahom clearly shows that the economic pattern of the people was primarily hunting. Thus, the burials at Burzahom do reflect their time.

PART II

NEOLITHIC-CHALCOLITHIC CULTURES

The neolithic-chalcolithic stage is known by a group of cultures which were late-contemporary of the Harappa culture ; some were even post-Harappan in date. Of these copper-stone using cultures, those known are O.C.P. Culture, Kayatha Culture, Ahar Culture, Malwa Culture, Jorwe Culture and Chirand Culture. Marked by characteristic black painted red wares, limited number of copper implements, sometimes augmented by bone and stone tools, and round and rectangular huts, all of them appear to be agricultural village communities.

Sankalia and his associates have made a special study of many of these cultures which fillup the gap that stood for long between the end of the Harappa Culture and the beginning of the Age of the Buddha. By now, more than two dozen important sites have been excavated but all of them have not yielded graves ; in fact, some of the above cultures (Kayath, Ahar, etc.) are completely unrepresented and we do not know at all as to how the people of these cultures disposed of their dead. Below are given the details of only those cultures and sites which have yielded clear evidence of the disposal of the dead.

---

23. Allchin, *The Birth of Indian Civilization*, p. 130, He sees the affinities of these burial practices in those observed in neolithic Mongolia.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Nagarjunakonda

Nagarjunakonda is a famous Buddhist site on the Krishna, in Andhra Pradesh. It was excavated several times but the prehistoric burials were encountered only during the 1957-58 excavations. The cultural-matrix found associated with the graves has been neolithic of the above description—pots of grey wares and polished stones axes being its chief elements.

The dead bodies were buried both in a separate cemetery and within the habitation; the cemetery was, however, more or less reserved for the adults and the habitational area for the children. The people followed the practices of fractional burial, as well as of complete inhumation.

False Extended Burials

The neolithic cemetery was located about a kilometre west of the habitation, near the river and on a kankary wasteland. There were eight graves dug by M. D. Khare.[24] They were all oblong pit-burials, measuring 2·03 metres in length, 0·50 metre in breadth and 0·35 metre in depth. The pits were only roughly dug as is clear from their irregular outlines. They were usually single burials; 'double burials containing the skeletal remains of two persons were exceptions. The bones were mostly kept in two groups with a little space left between them. It is significant to note that although the bones were of the post-exposure nature, their arrangement inside the grave was made in a manner which simulates an articulate burial—the skull was kept at one end and the long bones at the other. At times, however, they missed the proper placement of the bones; in one case the jaw bone was found near the pelvic girdle and in another the skull was located near the hip-bone. The examples in which the anatomical arrangement of bones was proper, the orientation was north-south, and the skull was placed towards the north.

The cemetery seems to have been in use for quite sometime since the graves have been found laid in two distinct strata. The grave-pits, in some instances of the upper stratum, had distinctly cut the graves of the lower stratum, as if the people had no knowledge of the pre-existing graves. The time gap between them, however, does not seem to be more than a couple of generations because the grave-goods recovered from all the burials show a marked uniformity. They consisted of bowls and tubular spouted pots of grey and pale grey wares of the usual neolithic types. The earthen bowls might have easily contained the food items while the spouted vessels, only water or any other liquid for libations, as has been suggested by Wheeler for the Brahmagiri examples.[25]

24. *IAR.* 1957-58, p. 5.
25. Wheeler, R.E.M., "Brahmagiri and Chandravalli, 1947", *Anct. Ind.* no. 4 (1947), p. 203.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Single Urn Burials

The urn burials were located below the house-floors. Unfortunately, only two examples were encountered in the excavations. The urns were globular and of pale grey ware. They were found half broken and badly decayed, the upper portion was missing in both the examples. The lower parts contained some fragmentary bones of the lower extremities of infants. The urns were found buried vertically in the ground. The grave-offerings consisted of only a few earthen pots. It is a little disturbing as to why the bones of only the lower extremities were found in the urns. It is possible that the upper extremities are lost with the decay of the upper parts of the urns ; of course, if the infants were buried in full.

MACERATING PITS

Some deep round pits were located at the eastern end of the neolithic habitation. They generally contained the kitchen refuge. Some post-holes round the pits were also encountered in a few examples. In the beginning, nothing definite could be said about the pits except that they might have been the refuge-pits. However, the post-holes round them stood against such a theory. Further, in one example of such pits, which was 1·31 metres in diameter, a complete skeleton of an adult was found lying in a sagging posture. It may, therefore, be reasonably suggested that the post-holes carried a canopy over the pit and the pit was intended to contain the dead body, ready for exposure.[26] It is difficult to imagine the circumstances under which the present skeleton remained *in situ* ; probably, before the last ceremony was over the site was deserted or the family left the place. Once a pit was no more in use for maceration because of one reason or the other it was used as a refuge pit, probably, during the final stages of the occupation of the site.

Animal Burials

Slightly west of the cemetery, almost on the bank of the river, a number of deep round pits surrounded by circles of stones and covered with heaped up stones were found. They looked like the megalithic cairn-circles. Some of them were excavated. Surprisingly enough, they contained not the human bones but the bones of animals as well as a few neolithic grey ware pots.[27] The animals buried have yet to be identified but the burials were fractional.

Nagarjunakonda is certainly the classic site for visualizing the dominant burial practices of the neolithic people of the south and the Deccan. By and large, the

26. Personal observations at the site. The author too was associated with the excavations.
27. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

adults were first exposed on open platforms or in macerating pits (?) and then their post exposed bones were buried in oblong pits dug in a cemetery. The infants were disposed of, probably, as complete inhumation in urns buried within the habitation. The neolithic folks also cared for their dead animals and buried them in a fractional manner similar to the adult human beings. There was, however, one difference : while the human burials were of the 'false extended' type, the animal burials were not, because the bones in the latter case were found kept in a disorderly manner.

Palavoy

Palavoy is a well known ash-mound site which, according to the excavator, has yielded iron in a context so far thought to be neolithic. Near the ash-mound, however, a real neolithic habitational mound exists. The place is located in the Kalyandurg taluk of the Anantapur District, Andhra Pradesh, and was excavated in 1966-67 by V. Rami Reddi.[28] The deposit at the site belongs to three distinct periods : period I is pre-Neolithic with only patinated flakes, period II is Neolithic with polished stone tools and grey ware pots, and period III is post-Neolithic. The graves only four in number, were found in the levels of period II.

Single Urn Burials

The burials at Palavoy were only of the infants of less than three years' of age. They were urn burials laid within the habitation but outside the houses. The burials were of two types : Single Urn Burials and Double Urn Burials, although in both the categories the urns were kept in a vertical position. Burial nos. 1, 3 and 4 are of the latter group, while no. 2 is of the former. This Burial no. 1 is a grey ware urn with neck painted with the red ochre. The bones found inside it were highly decayed. The urn of Burial no. 3 is found covered with a grey ware channel spouted bowl with paintings in red ochre executed after firing the pot. It yielded only a few decayed bones. Burial no. 4 also is exactly of the same type.

Burial no. 2 contained two urns, one covering the other. Inside it was found the skeleton of a child in a folded or embroynic posture. The orientation of the body was north-south, the head being kept towards the north. Some of the bones in this example were also found completely missing or badly decayed.

The Palavoy evidence is in conformity with the one found at Nagarjunakonda. It has in fact, elaborated the former evidence in more exact terms.

---

28. Reddi, V. R., *Pre-and Protohistory of South-Western Andhra Pradesh*. Unpublished Ph.D. thesis, Deccan College, Poona.

CC-0. Agamnigam Digital Preservation Foundation,Chandigarh

Piklihal

It is an important site in the Raichur doab, Andhra Pradesh, and was excavated by F. R. Allchin. On the whole, four burials were dug here, two belonged to the Upper Neolithic period, which is the same as our Neolithic-Chalcolithic period, and two, to the Iron Age.[29] Here, only former two burials will be considered.

Extended Pit Burials

1. The excavator found the extended burial of an adult female in a 'coffin-shaped' pit in Site VII, layer 6. The body lay upon its back with the head inclined to the right and roughly oriented towards the north. A grey ware spouted jar was placed to the left of the head. Near the pelvic bones, there lay a tall vase of the same ware.

2. A body was found laid on its back in a shallow pit in Site VIII A and in layer 4. It was oriented south-north, the head being kept towards the south.

OFFERINGS

(Burial no. 2) "On the right-hand side of the skull lay five large chert blades, parallel to each other, while at the feet were two much worn basalt axes; near the pelvis were recovered a few fragments of ill fired ware, while above body the scapula of a bovine was discovered in the grave.[30] This impressive list of the utilitarian objects shows that underlying the burials there was some definite conception of life after death.

Tekkalkota

The site is situated on an irregular ground over a granitic hill in the Bellary District of Andhra Pradesh. It was first excavated by M. S. Nagarajarao and then by H. D. Sankalia.[31] It is a single culture site with two phases of occupation : Phase I, the lower phase, has yielded six burials of which three were of adults and three of infants; Phase II has yielded thirteen burials of which two were of children and eleven of adults, including a few of grown up children. These burials corroborate the evidence already gathered at other sites, as also elaborate some aspects of it. In addition, these have brought to light a couple of new features.

29. Allchin, F. R., *Piklihal Excavations.*
30. *Ibid.*, p. 24.
31. (a) *IAR*, 1963-64, p. 25.
(b) Nagarajarao, M. S., *The Stone Age Hill Dwellers of Tekkalkota,*
(c) Personal communications with Dr. Z. A. Ansari, the co-excavator of the site.
(d) *IAR*, 1964-65. Unpublished.
(e) Sankalia, H. D., "Stone Age Hill Dwellers of South India", *Indica*, pp. 129-140,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PHASE I

ADULT BURIALS

The adults were disposed of in two ways: 'Fractional' and 'Complete Inhumation'. The former was attested at Nagarjunakonda and the latter at Brahmagiri. However, while the fractional burials at Nagarjunakonda were located in a cemetery, here they were found within the habitation.

False Extended Burials

These are divisible into two groups, (i)Single False-Extended Burials, and (ii)Multiple False-Extended Burials. They are almost similar to the Nagarjunakonda types. As said earlier, the Nagarjunakonda examples are classified as 'false extended', i.e., the secondary bones arranged in an anatomical position. Almost similar arrangement of bones has been observed at Tekkalkota. The attempted orientation has been south-north, the skull being placed at the southern end of the grave ; Burial no. 7 is a typical example of this group. The burial pit measures ·60 metre in length, ·40 metre in breadth and 40 cm. in depth. It contained the bones of an adult male of 20 to 25 years of age. The grave-offerings consisted of a grey ware pedestalled goblet with post-firing red ochre paintings. It is significant to note that over the last filling of the grave, which was the self-same earth, the grave-makers placed a series of granite boulders from the region near the skull to the extremities. It is, probably, indicative of certain ideas and notions of extra-mundane type. Nagarajarao, on the authority of Kennedy, has suggested that it was done to check the spirit of the dead from coming out of the grave at night.[32] Although such a possibility can be visualized on the basis of similar tribal practices but that need not necessarily be so in the present example.

Burial no. 1 is a typical example of this type. In a narrow pit, 1·60 metre long, ·45 metre wide and 43 cm. deep, the fractional bones of three individuals, aged between 20 and 25 years, were found in a mixed up condition. The sex of only one of them could be ascertained, it was the skull of a female. It appears to be a family burial although one might argue in favour of its being a 'communal burial' also. By and large, a communal burial consists of bones of still larger number of individuals than found in the present example. Moreover, so far not a single neolithic-chalcolithic site in India has yielded the evidence of a burial with more than three individuals. It is, therefore, difficult to suggest that it was a communal burial.

Extended Pit Burials

It is represented only by one example, that of Burial no. 5 of phase I. It is more or less similar to the one found at Brahmagiri. Within a narrow pit dug between

32. Nagarajarao, *op. cit.*, p. 29.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

two blocks of stones the body of a male of 25 to 30 years of age was buried with the head towards the west and legs towards the east. The grave offerings consisted of a large urn and a short spouted vessel of grey ware.

INFANT BURIALS

Phase I : The children below 3 years of age were disposed of in two ways : (i) in single urns, and (ii) in pits. Three burials, located within the habitation, have been dug so far. One of these was found below the floor of a house, and the remaining two, outside the walls of this house. It might indicate that the former person was more near and dear to the parents than the latter two, but it is only a conjecture. Among the Neolithic-Chalcolithic folks, the infants were usually buried in urns, therefore these pit-burials should be regarded as exceptions.

Single Urn Burial

In a usual grey ware globular urn a few fragmentary bones of a child were found along with a polished stone axe. It is possible that it was a case of child-sacrifice of a magico-religious kind ; of course, if it was really a fractional burial and not a case of partially decayed and disturbed burial.

Pit Burials

In a pit, below the floor of the house, a child of 2 years of age was buried in the folded position. Only some selected bones were recovered since the smaller ones had completely decayed. The third burial was found badly disturbed.

PHASE II

ADULT BURIALS

The burials in phase II, by and large, followed the practices of the earlier phase. There were, however, a few departures also. Thus, as in phase I the children were found buried in single urns, so also in phase II they were given single urn burials, but while in phase I adults were buried only in pits, in phase II some were entombed in multiple storage jars telescoped in one. In phase I the accepted orientation of the burials was south-north, with the head towards the south, but in phase II it changed to north-south, the head being towards the north. As far as the pottery and other associated objects are concerned, they obviously witnessed a marked change which was in sequel to the changes that occurred in the cultural matrix of phase II. Thus, instead of only grey ware pots now plain and white painted black-and-red ware pots, black painted red ware vessels and plain black-and-red ware utensils were found in the graves. Some of the graves also contained a few neolithic axes and hammer-stones. The black-and-red ware pots, found exclusively in the graves, are of the types associated with megaliths. Sankalia, therefore, feels that "its appearance in an earlier context in

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

surroundings which encourage the use of large boulders, might have led to later megalithism"[33]

Extended Pit Burials

Nagarajarao discovered only one burial of this category which was of a female of 40 to 45 years of age. The grave offerings consisted of seven pots of different wares kept near the feet. The skeleton was lying on its right shoulder, slightly tilted towards the right. The face was turned westwards.

Sankalia excavated nine burials of this category. Of these, Burial nos. 2, 5, 7 and 9 were of the usual type, while Burial no. 1 was found sealed by five stones kept in a row, and reminds us of a similar burial of phase I. Burial nos. 6, 10 and 11 were found greatly disturbed.

Multiple Jar Burial

Sankalia discovered an extended burial of an adult inside a coffin prepared out of four big storage jars, the middle ones kept mouth-to-mouth.[34] One of the jars had two nipple like protuberances, which might be indicative of the sex of the person buried. The jar has also a necklace like rope decoration. It is significant to observe that it was a comparatively richly furnished grave with as many as nine pots ; and if richness of grave-goods had anything to do with the status of the person, it could be the grave of the First Lady of the village. (Plate XVI)

INFANT BURIALS

Only two burials of this group have been encountered, one was in a globular grey ware urn and the other in a big storage jar of red ware.

Single Urn Burial

Burial no. 3 contained the skeleton of an infant in a vertically kept grey ware urn. The upper portion of the urn was, however, broken and decayed.

Single Jar Burial

The burial contained the skeleton of a child in a big jar. The placement of the jar was horizontal and not vertical, unlike other single urn burials.

The Tekkalkota evidence of burials has been very significant in the sense that with the passage of time the burial practices also multiplied. They exhibit a marked

33. Sankalia, *op. cit.*, pp. 136-38
34. *IAR*, 1963-64, p. 25. Sankalia, however, feels that it was a 'false extended-burial' of the post-exposure type. *Ibid.*, p. 137

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

uniformity, no doubt, but they also emphasize regional variations. Jar (storage) burials, single and multiple, of children and adults respectively, are peculiar to this region. The evidence is important in one more respect. Adult burials are usually not found in such a large number and that too within the habitation. It was, therefore, thought that the adults, by and large, were disposed of differently; probably, they were cast away or burnt far away from the habitation, or else, buried in a cemetery similar to one found at Nagarjunakonda only, so far. It is now clear that there were no hard and fast rules regarding it and regional variations could easily occur. The burials of phase II, at least eleven of them, were found laid in a row at one end of the settlement. It might signify some sort of a cemetery laid in a deserted part of the habitation. A basic difference between the cemeteries at Nagarjunakonda and Tekkalkota will, however, always remain there : while at the former site the burials were fractional at the latter they were complete inhumations.

Brahmagiri

Brahmagiri is the famous site of an Asokan Edict and is situated in the Chitaldurg District of Mysore. It was first excavated in 1940-42 by M.H. Krishna[35] and then in 1946 by Mortimer Wheeler.[36] The habitational deposit has yielded the remains of three cultures : (i) Neolithic-Chalcolithic, (ii) Megalithic, and (iii) Andhra-Satavahana, in a successive order. The Neolithic-Chalcolithic deposit, called earlier as polished Stone Axe Culture, is divided into two phases, 1A and 1B, the former earlier than the latter.

Phase IA is comparatively a shallow deposit which has yielded some typical handmade (neolithic) grey ware pots, sometimes with post-firing red-ochre paintings of geometric and floral designs and sometimes with different incised patterns. Phase IB is characterized by Burnished Grey Ware pots, as well as copper and low grade bronze implements.

On the whole, 20 burials have been excavated at Brahmagiri, 19 of them belong to the IB phase of period I and one to the earliest phase of period II. The burials are of two types : (i) Single Urn Burial, (Plate XVI) and (ii) Extended Pit Burial.

Single Urn Burials

The urn burials have been located within the habitation, as at other neotlithic-chalcolithic sites. The urns were handmade, coarse in texture and dull mottled grey in

35. *Mysore Archaeological Department, Annual Report,*
(a) For 1940 (Mysore, 1941), pp. 63 ff.
(b) For 1943 (Mysore, 1943), pp. 100 ff.
36. Wheeler, *op. cit.*, pp. 182-310.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

colour. The body was globular with a wide mouth, flared rim and rounded base. They measured 33 cm. in height and 31·50 cm. in diameter at the mouth. All of them have been found covered with the lower half of a broken urn or with a bowl kept inverted or upright. The pits in which these urns were inserted were no more bigger than sufficient to accommodate them. The urns invariably contained the skeletons of infants whose bodies could be tightly folded to fit into the restricted space. (Plate XVII) In this connection Wheeler has observed : "in a few cases, where disturbance and advanced decay had taken place, it was not possible to affirm that the body had been buried intact, but the evidence is not clear enough to establish deliberate fractional burial, such as occurred in the megalithic cists."[37] It clearly explains the position met with at Nagarjunakonda where in two broken urns only a few bones were found.

The urns, as a common practice, did not contain any offering worth mention except in one example, T 36, where a small rod or pin of bronze was found.

Extended Pit Burials

The evidence of graves at Brahmagiri is important not so much for urn burials as for complete inhumation in oblong pits with a sufficient number of grave-goods. Unfortunately, only two such graves were encountered out of which only one was exposed completely. The evidence, however, is conclusive for the grown up children whose bodies were also buried within the habitation.

The skeleton recovered was of a grown up child of 8 to 10 years of age. The head lay towards the east and the legs towards the west. Two earthen bowls were placed near the upper ends of the two femurs and a vessel with a funnel-spout lay above the skull. "Whether this vessel, with its cylindrical funnel, was used to pour libations into the mouth or ears of the dead, as has been conjectured in the case of the funnelled vessels, (at Luristan), cannot be guessed from an isolated example", observed Wheeler in 1947.[38] It may, however, be pointed out that spouted vessels of this type have now been found at several other places also, such as Nagarjunakonda and Tekkalkota, besides Inamgaon, a site near Poona. It is, therefore, quite probable that the spouted pots were used for pouring libations.

The ritual of libations involve some definite ideas and notions regarding life after death. It is not possible to comprehend their form but it is certainly possible to assert their presence. The disposal of the dead was certainly a complex affair for the survivors at Brahmagiri.

---

37. *Ibid.*, p. 226.
38. *Ibid.*, p. 203,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Brahmagiri evidence has added some very significant facts to our knowledge of the Neolithic-Chalcolithic burial practices, e.g., complete inhumation of grown up children, pots for pouring libations, and bronze implements forming part of the grave-offerings.

Hallur

The site is situated in the Tungabhadra Valley and was excavated by M. S. Nagrajarao. From the levels of period I, phase II, datable to circa 1500-1100 B.C., the excavator brought out three double-urn burials. Out of them only one. No. 1, has been found intact. "A pit was dug into the layer 10, a series of floors being cut, and was sealed by layer 1. which itself consists of a number a floors. Thus, the burial was under a well rammed floor proving that it was within a house."[38(a)] The coffin was oriented east-west.

Burial no. 3 is worthy of note because it had large storage jars with crude applique decoration depicting a rope or chain pattern, with two small conical knobs affixed at the two ends. This reminds us of the Tekkalkota Four Jar Burial.

T. Narsipur

It is one of the southern most neolithic-chalcolithic site in India and is located on the left bank of the Kavery in District Mysore. It has been excavated by M. Seshadri.[39] The only burial discovered was laid well within the habitation.

Extended Pit Burial

The body of a female of 21 to 25 years of age was lowered in a 'cradle-shaped pit' and oriented east-west, the head being placed towards the west. The excavator observed two post-holes, one on either side of the oblong pit. Its exact meaning is difficult to guess although the post-holes might have carried some sort of a canopy or cover. The body was lying on its back with hands crossed on the abdomen. The face was slightly titled to the right. Two pots of the Burnished Grey Ware were placed near the head ; besides, a head-rest and a shallow lipped bowl near the skull. They seem to be particularly ritualistic. The lipped bowl here replaced the spouted vessels for pouring libations. The bones below the ankles were missing in this example as they were also missing at Nevasa, Chandoli, Daimabad, etc. All brought together heighten the social importance of the person.

38a. Nagarajarao, M. S., *Protohistoric Cultures of the Tungabhadra Valley*, pp. 29-30

39. (a) Seshadri, M., "A Neolithic Burial from T. Narsipur", *Puratattva*, vol. 2, (1968-69), pp. 55.66,
(b) *IAR*, 1961-62, pp. 35-36,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Terdal

It is a site in the Bijapur District of Mysore and has been excavated by A. Sundara.[40] The habitation site has not yielded any burial but a megalithic cemetery, of Passage Grave, about 2 km. away from the habitation, is now well known for a burial which on several counts seems to belong to the Neolithic-Chalcolithic period. Architecturally it is a round barrow (i.e., a heap of cairn-stones, without the stone-circle, laid over the burial pit) i.e., a megalith, but culturally it has yielded neolithic-chalcolithic material as grave goods.

Hybrid Burial

In the cemetery, which was primarily megalithic, while digging a cairn-circle, apparently of the megalithic group, the excavator detected at the bottom of the grave-pit. a 'false extended burial' of the Nagarjunakonda type. The accompanying grave-goods consisted of the burnished Grey Ware pots, microliths and a copper bangle. This may, therefore, be placed in the transitional phase—from neolithic-chalcolithic to the megalithic. The sepulchral monument of the megalithic type was adopted by the neolithic-chalcolithic folk for the graves of their own people. It is significant to note that the actual mode of the disposal of the dead—fractional arranged in an anatomical fashion-remained the same, the change occurred only in the monument. It clearly reflects the cultural hybridization and overlap of the period it belonged.

Kovalli

The site situated in District Bijapur, Mysore, is about 21 kms. north of the town Bagalkot. It has been put to excavations by R.S. Pappu.[41]

Double Urn Burial

The excavator found a double-urn burial containing the skeleton of a child. It was buried below the floor of a circular house. The funerary appendage consisted of only three small pots.

The double-urn burial, in which the urns were placed horizontally on the ground, is the common type of neolithic-chalcolithic burial practice in the upper Godavari-Pravara Valley.

Nevasa

It is a classic site for the neolithic-chalcolithic burial practices in Maharastra. The mound is near the village of Nevasa on the Pravara in District Ahmednagar.

40. Sundara, A., "A New Type of Neolithic Burial, Mysore State", *Puratattva*, vol. 3 (1969-70), pp. 23-33.
41. *IAR*, 1964-65. Unpublished.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

For the last several years it has been extensively excavated by H. D. Sankalia.[42] In all, 131 graves have been dug of which only three are of the adults, the rest are child-burials. The burials have been found scattered all over the habitation, but at least 17 of them were concentrated in a small area of 6·67×6·67 metres. As a rule, the infants were buried in double-urn coffins and adults in oblong pits, but in two examples children were found buried in single urns and in a few instances in three and five urns. These so called coffins were oriented north-south.

PERIOD III

INFANT BURIALS

Infant burials predominate at Nevasa. It has been observed that in most of the examples the urn burials were, probably, not placed in pits; they were laid on the ground and covered with earth. These 'urn earth-burials,' so to say, must have left the ground quite uneven and one wonders as to how did they remain so safe. It will be seen in the following pages that at Inamgaon the urn-coffins have been found laid in pits big enough to accommodate them. It is likely that at Nevasa also shallow pits were made for the urns but they could not be detected. But this is only a surmise, as the excavators have categorically denied the presence of burial pits in their report.

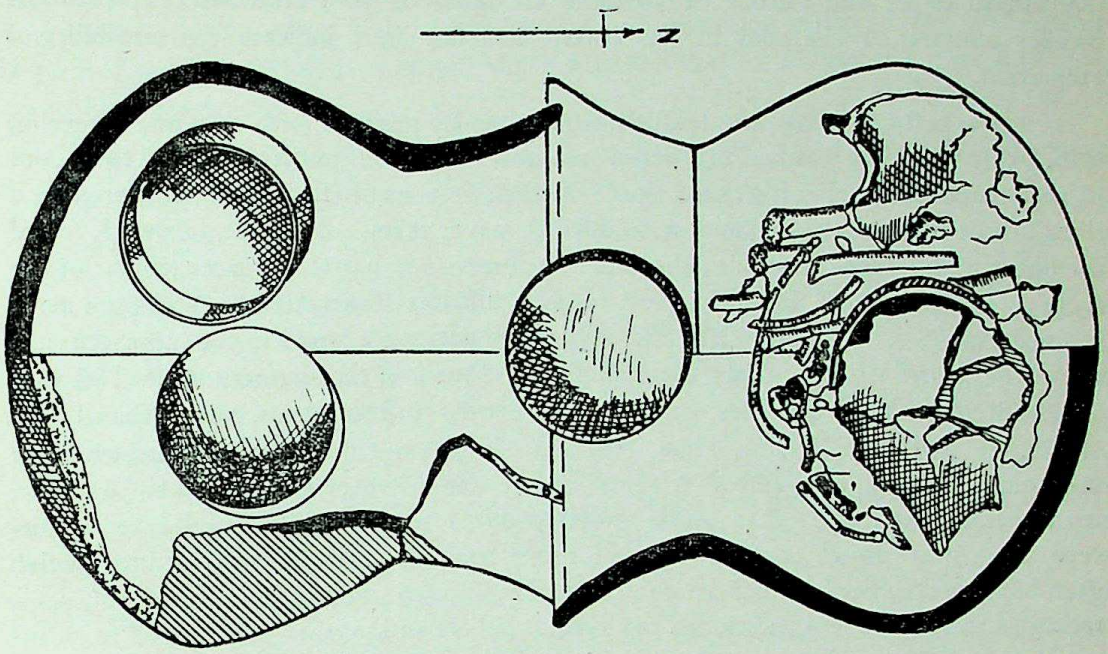
In a number of examples the urns have been found buried below the floors of the houses. Obviously, once the flesh started rotting, the rooms could no longer be hospitable for a considerable time. Sankalia, therefore, feels that the particular houses were deserted temporarily. But that may or may not be the case since the dictates of traditions in this matter are stronger than the considerations of hygine and foul smell. Ehrhardt, the physical anthropologist who worked on the skeletal remains, has, however, to offer another alternative. She is of the opinion that "the dead bodies of the children were placed into the urns after a process of dessication. In such a process parts of the dead body can be lost which explains the absence of a number of bones in several graves."[43]

In some of the urns, on the other hand, charcoal pieces have been found. Not only that, some of the bones show marks of burning. Ehrhardt, however, feels that the charcoal pieces 'may have derived from burnt offerings (?); it is possible that they were introduced along with the earth above, into the urns.'[44] This seems to be true since the marks of burning are seen on a very few bones and are so few that these skeletons do

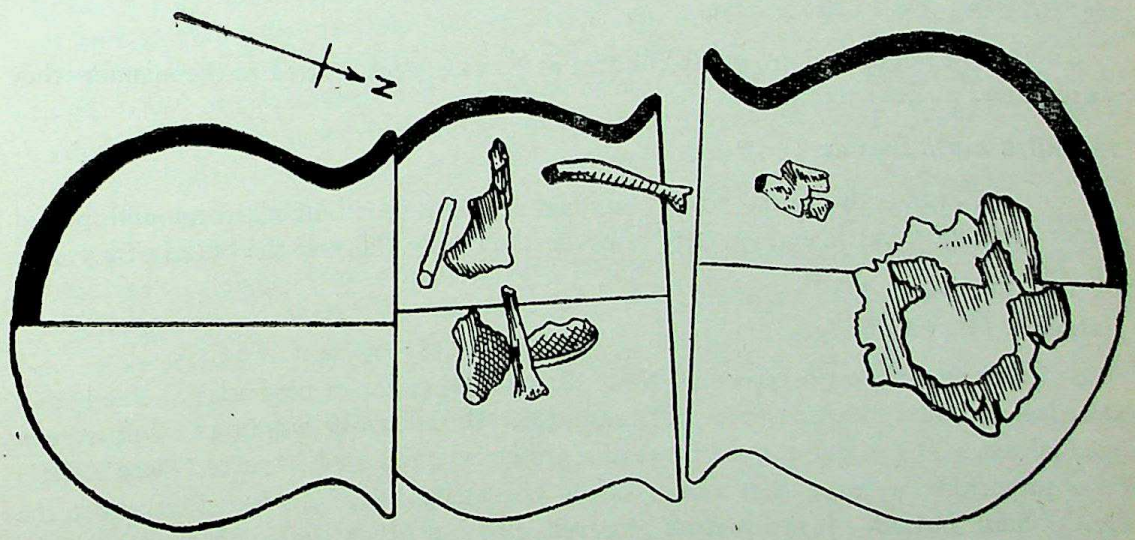
---

42. Sankalia, H. D., *et al.*, *From History to Prehistory at Nevasa, 1954-56.*
43. *Ibid.*, p. 522.
44. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



1



2

Fig. 1. Double Urn Burial Fig. 2. Multiple Urn Burial
Both from Nevasa

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

not appear to be the burials of partially cremated or fully cremated corpses. The meager amount of charcoal in the graves also does not indicate the possibility of cremation.

The body, it seems, was laid in a fully extended position, with only one exception (No. 14) in which it was laid in a flexed position. The legs, in certain cases, could not be accommodated in the restricted space of the two urns of the coffin and, therefore, a third urn or pot, painted or plain, was added to cover them. Ehrhardt, however, found the bones in different positions ; she did not observe any particular arrangement of the skeletal remains found in the urns.[45] One significant observation has still been made in some examples. The skull, ribs and upper extremities are found in the northern urn while the bones of the lower extremities are found in the southern urn. This was, no doubt, true only of cases with both the urns full of bones, e.g., of Burial nos. 24, 28, 10 and 19. By and large, 'the urn pointing north contained bones while the one pointing south was empty.'[46] This clearly shows that, generally, the southern urn was non-functional. It is quite understandable since the bodies of the infants were usually so small that they could easily be accommodated in single urns, which often happened to be the northern ones, probably, chosen under the dictates of some traditions which were conditioned by certain beliefs and myths. The use of two urns where only one could have sufficed amply shows that in respect of burial customs traditions die hard.

ADULT BURIALS

The adults and grown up children at Nevasa were buried in the manner they were buried at Tekkalkota.

Extended Earth Burials

The dead body (Burial no. 14) was laid extended on a lime platform and buried under some loose earth, enough only to cover the body. It was the burial of a grown up child.

Extended Pit Burials

The two other examples (Nos. 10 and 19) were of pit-burials. The bodies were laid extended similar to that at Brahmagiri. Burial no. 10 was of an adult woman aged 20 years (?) and Burial no. 19 was of a grown up child aged 10 years. (Plate XVIII) It is important to note that bones below the ankles have been found missing in the case of adult burials. It is a feature observed also at other chalcolithic sites in the

45. *Ibid.*, p. 506.
46. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

region, e.g., Chandoli and Daimabad, as will be seen later. There is hardly any exact parallel of this custom in India. However, amongst the Kharisas of Manbhum,[47] there is a custom in which at the time of burning the body the small finger of the right hand is cut and kept in a small earthen pot which is buried under a dolmen on the 10th day after the death.

It is difficult to guess the exact meaning of this practice but that it had some magical beliefs underlying it is more than clear.

THE OFFERINGS

The offerings were made in earthen pots which were generally of 'black-painted red ware'. Some of the typical pot-forms included simple bowls, globular vessels, high necked pots, bowls with carinated profile, etc. It has been observed that in a grave the number of pots containing offerings did not exceed four. The items of offerings included microliths, such as retouched and plain blades, polished stone axes, beads of carnelian, faience and copper, etc., the last ones were strung in threads of silk and cotton. The animal bones recovered from the graves indicate that even the meat-items were offered to the dead.

Infant burials outnumber Adult burials

It is extremely significant to note that out of 131 burials dug only three were of the adults. The evidence from Tekkalkota, Inamgaon, etc., shows that the adults buried were not in such a small proportion, although the percentage of adult burials was never equal to that of child burials. How can, therefore, the preponderance of the infant burials at Nevasa be accounted for ? The following chart of the age of the dead would show that the largest number of dead infants belonged to the age-group of 2 to 4 years. This might show that the rate of infant mortality was very high at Nevasa and the people were at a very low stage of cultural development since the protection against diseases affecting the still-born and the babies was almost nil. Primitive people generally suffer from this limitation. Just a hundred years ago the infant mortality in India was very high. Unfortunately, no work has been done to detect the diseases which caused their death. According to palaeo-pathologists, only those fatal diseases can be detected which affect the bones adversely and that the distortion in bones is more pronounced amongst the adults than amongst the infants. The chart is based upon Mrs. Ehrhardt's work on bones from the Nevasa burials.

47. *Census of India* : 1931., p. II, p. 110.

CC-0. Agamnigam Digital Preservation Foundation,Chandigarh

Trench	Burial No.	Number of persons	Age	Grave-goods, etc.
A	1	1	2-3 years ; Infant	Many potsherds
	2	2	Newly born child	3 small clay dishes
	3	2	About 6 months	Some charred bones
	4	2	About 1 year	
E	21	1	About 1 year	...
	5	1	Infant	...
	7	1	6 months to 1 year	3 pearls, carnelian beads, worked pieces of bone.
	8	2	Infant, plus a few bones of an adult	...
F	9	1	Newly born child	...
	10	?	...	
	15	?	...	
	16	?	...	Bones with marks of burning
	17	?	...	...
	24	1	About 1 year	
	25	1	About 1 year	
	27	1	Infant	...
	28	1	6 months to 1 year	...
				...
H19	10	2	About 20 years + Infant bones	...
	11 A	2	About 10 years + Infant bones	Small wood pieces. microliths
Z	14	1	About 6 years	Small pieces of charcoal ; Earth burial

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

aimabad

It is a site, situated very near Nevasa, which was excavated in 1958 by .N. Deshpande.[48] It is the key site for the whole of the Deccan since it has atigraphically established the priority of the Burnished Grey Ware (typical of the olithic culture) over the Malwa chalcolithic ware, and the priority of the latter er the Jorwe chalcolithic ware. They have respectively come from phases I, II and . All these phases have yielded burials. This has put the Nevasa evidence in the oper perspective since, culturally, the Nevasa burials belong to the Jorwe level mparable to phase III of Daimabad. The burials occur within the habitation, as at evasa and other places. Extended burial has been found in all the phases but urn rials occur only in the last phase.

PHASE I

ULT BURIAL

tended Pit Burial

In the levels of Phase I only one burial was found. It was an extended burial ich contained the remains of an adult. The body, oriented north-south, was laid an oblong pit. The head was placed towards the north. The grave was devoid of offering. Dhavalikar observes that the grave was disturbed by a later pit. though it is not possible to say whether the burial took place within the courtyard inside the house, yet it is sure that the dead was buried within the habitation.

PHASE II

ULT BURIAL

tended Pit Burial

The body, in this example also, was laid extended in an oblong pit without any ave-good. Belonging to the Malwa culture, this is the only example of human burial d as such it is extremely significant. The evidence is clear in favour of culture-ntact situation. In Malwa, the Malwa culture sites have not produced any evidence the ceremonious disposal of the dead, while in the Deccan, a region far away from e epicentre of the Malwa Culture, the Malwa people are seen practising the local stom. How could it happen? Obviously, when these people entered into Maha-shtra and found the Neolithic folk burying their dead within the habitation, they llowed the suit.

PHASE III

ULT BURIALS

In this phase, two burials have been located of which one was completely spoiled and the other was laid on a well laid floor. It was marked by a set of 14

. *IAR*, 1958-59, p. 1. Also, M. K., Dhavalikar, "Daimabad, A Rediscovery", *Puratattva*, no. 3 (1969-70), pp. 34-43.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

post-holes arranged around the skeleton. Deshpande[49] seems to have rightly interpreted it as an evidence of 'a canopy over the body laid in state' before the final burial. In this case also the bones below the ankles were found missing. (Plate XIX) They are likely to have been deliberately cut and removed, although there is no positive proof for the deliberate cutting. Our basis is only the statistics, since at several sites this phenomenon has been observed.

INFANT BURIALS

Multiple Burials : In this phase, along with the extended burials, multiple urn burials have also been found. The evidence is the same as at Nevasa[50] since the majority of them were double urn burials. In one example, however, three urns were used to make the coffin.

Chandoli

It is another chalcolithic site yielding burials which completely corroborate the evidence of Nevasa. The mound is situated on R. Ghod, some 64 kms. north-east of Poona, and it was excavated by S.B. Deo.[51] This is a single culture site with only two metre thick deposit.

On the whole, 24 burials have been dug, of which, 11 belong to the lowest levels, 10 to the middle levels and 3 to the upper levels. Of these, as many as 23 were urn burials containing bones of children ; only one was an adult (male) burial in a pit. The ratio between the child and adult burials remains as lopsided as it was at Nevasa. The age-group of the infants again remained the same : 2 to 3 years. The C^{14} dates of the middle levels place most of the burials in the 14th century B.C. ; the earliest burial therefore, is likely to go back to the 16th century B.C. and the latest, to the 13th.

CHALCOLITHIC PERIOD

INFANT BURIALS

Double Urn Burials

The urns used for burials have been the usual handmade globular urns of grey ware with finger-tip design at the neck. The burials were mostly of double-urn type. It has been significantly noted that in some instances, e.g., in Burial nos. 4, 8 and 11, the northern urns were bigger in size than the southern ones. It has been repeatedly observed that the northern urn contained either the full skeleton or the upper extremities. In either case the functional importance of the northern urn was decidedly

49. *IAR*, 1958-59, p. 18.
50. Sankalia, *op. cit.*
51. Deo, S. B., *Chalcolithic Chandoli*.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

more than that of the southern one. At Nevasa, however, this feature was observed only in Burial no. 14. The reason for this was, therefore, not only functional but also regional choice. As a rule, the urns were kept horizontally on the ground, but in Burial nos. 3, 21 and 22 they were buried vertically in the ground as at Brahmagiri and Nagarjunakonda.

Single Urn Burial

Burial no. 11 was a single urn burial covered with a knobbed lid.

Multiple Urn Burial

Burial no. 15 was a multiple urn burial with three urns of diminishing sizes-from north to south, 61 cm., 46 cm. and 41 cm. in height respectively.

Symbolic Urn Burials (?)

Burial nos. 5 and 10 did not yield any bone. These were, therefore, only symbolic. It is, however, also possible that they contained bones of newly born babies which had completely withered away.

Most of the burials were laid directly on the floor of the house, as is evidenced by the patches of floorings still sticking to the urns of as many as twelve burials. However, some of them, particularly those laid in the black-cotton soil, were definitely placed in pits dug below the floors.

ADULT BURIALS

Extended Pit Burial

Everytime a chalcolithic site is excavated a problem is posed. Was cremation practised? The Nevasa evidence, as has been said earlier, has not been very helpful in this regard. The Chandoli evidence is equally dubious, as may now be seen.

The Burial no. 16 was of an adult. In this the body was laid extended in a pit. The bones below the ankles were found removed while the rest of the skeleton lay extended; it is a position similar to that at Nevasa. Significantly, the marks of burning were detected on the skull, neck and jaw-bones. The excavator has taken them as accidental and not intentional since pieces of charcoal have not at all been found in the grave. In his opinion, therefore, "the inhabitants might have used the area above the burial as their kitchen; the portion which was lying just above the skull, neck and clavicle, might have been the seat of a hearth and the heat produced underneath might have been the cause of such burning. Moreover, this is a new feature not associated with any of the adult burials at Nevasa, so far."[52]

52. *Ibid.*, p. 143.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

THE OFFERINGS

The offerings were made in earthen pots of the black-on-red Jorwe ware. The pottery types were carinated bowls, high necked globular pots, convex sided bowls, etc. Usually, a burial yielded 3 to 4 pots, only No 14 had as many as ten vessels. It is interesting to note that these pots were kept both inside and outside the urns. Burial no. 14 has been especially noted for a shell bangle as well as a beautiful necklace of eight copper and one jasper beads round the neck of the child. The beads were strung in a thread of true flax. A copper anklet has also been found near the bone of the left leg of the buried child.

On all counts, the child entombed in Burial no. 14 seems to have enjoyed a wealthier parentage than the rest buried in the site, and to that extent he or she belonged to the family of some importance. Burial no. 2 is equally marked by the presence of a necklace of beads similar to that found in Burial no. 14.

Inamgoan

Inamgaon, like Chandoli, is on the Ghod, some 100 kms. east of Poona. Sankalia is excavating the site since 1968.[53] Three culture-complexes have been

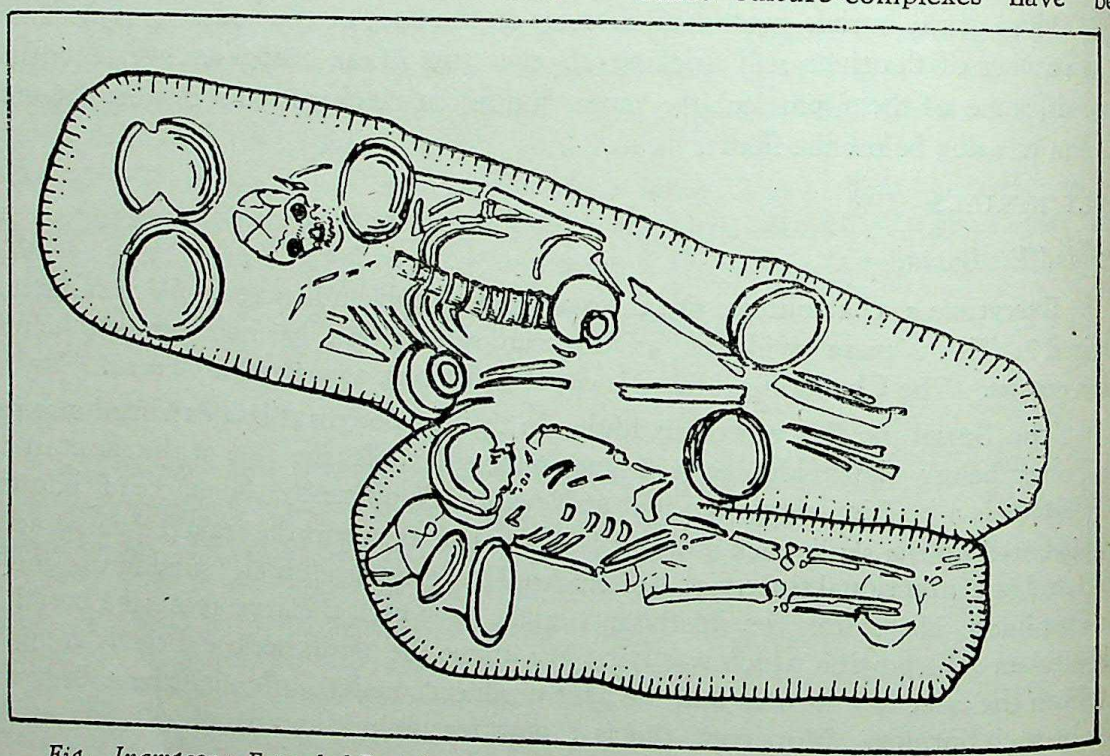


Fig. Inamgaon : Extended Burials in pits

53. *Dharmayug*, 22nd June, 1969, p. 20.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

marked at the site so far : phase I is Malwa, phase II is Lower Jorwe and, phase III is Upper Jorwe. As many as 18 burials have been excavated at the site, all belonging to phases II and III. Three of these were extended pit burials of adults and the rest were double urn burials of infants.[54]

Extended Pit Burials

Burial no. 1 was an oblong pit, neatly cut into the floor of a house. It contained the skeleton of an adult, lying in the north-south orientation, along with seven pots in different positions : one spouted vessel near the head, two slightly below it, one near the shoulder, two on the knees and one on the pelivic girdle. Burial no. 2, however, had only two pots, one being a spouted vessel of the painted Jorwe ware. The skeleton was of a grown up child. Burial no. 3 was a simple extended burial. (Plate XX and Fig. 9).

Double Urn Burials

The urn burials invariably contained the remains of infants of 2 to 3 years of age. They were completely folded in a limited space of two urns laid horizontally in shallow pits. They were, by and large, devoid of any offering but in one example an antler point has been found placed inside an urn. (Plate XXI).

The excavations are in progress and the site is expected to yield many more burials. On the whole, the Inamgaon evidence corroborates that gathered at other places in the region. It has, in addition, clarified the position regarding the pits for the urn-coffins. At Nevasa a doubt was raised regarding their presence; at Inamgaon it has been set at rest because the pits, howsoever shallow, have been clearly marked in almost all the examples.

Bahal-Tekwada

This is the only site in the Tapti basin which has yielded evidence of burials under closely observed excavations. It assumes a particular importance since not a single chalcolithic site in Rajasthan or Malwa (the supposed epicentres of two powerful chalcolithic cultures in India) has so far been credited with a human burial in spite of the fact that more than half-a-dozen important sites have already been excavated in these regions. This is a twin-mound site, so to say, one on the left bank of the Girna is known as Bahal and the other, opposite to it, on the right bank, is called Tekwada. Both are situated in the Jalgaon District of Maharashtra. Excavations, by M.N. Deshpande, have shown that Tekwada was the cemetery of the people who lived at Bahal.[55] Six Urn Burials and two Extended Pit Burials have come to light in the cemetery. Unlike

54. Personal communications from Prof. Sankalia. Also, *IAR*, 1968-69, unpublished.
55. *IAR*, 1956-57, p. 18.

CC-0. Agamnilaya Digital Preservation Foundation, Chandigarh

most of the sites in the Deccan, Bahal, the habitation mound, has not yielded a single burial.

Single Urn Burials

All the six burials are of the 'Single Urn Burial' type, broadly similar to those found at Nagarjunakonda, Palavoy, Brahmagiri, and in a few examples at Nevasa, Chandoli, etc. All of them are single urns buried vertically in the ground and covered by a lid, individually. They contain fragmentary bones of children ; one urn contained the bones of only one child. The offerings, placed inside the urns, consisted of two to five small pots of plain black-and-red and grey wares. In one of the urns a few beads of paste, carnelian and steatite have also been found. Stratigraphically, the urn burials came from the Black Cotton Soil, overlying yellow clay which contained extended burials.

M.K. Dhavalikar, the co-excavator of the site, has made some important suggestions with regard to these burials. He writes, "...the Single Urn Burials form a class by themselves. They are rather rare in the Nasik-Jorwe culture zone and have not so far been encountered anywhere except Tekwada and Daimabad. Typologically, they are altogether different (the shape of the urns is different from that one finds in the grey ware burial urns of the Deccan, and in size the Tekwada Urns are much bigger than those anywhere in the Deccan or South) and, therefore, can be taken to represent, with a reasonable amount of certitude, a different cultural tradition. Belonging as they do to the Nasik-Jorwe culture complex, they appear to be a diagnostic trait of yet a different cultural strain."[56] The hypothesis is quite interesting but the question is whether these burials represent a regional variation of an overall Neolithic-Chalcolithic urn burial tradition or an altogether different strain in the urn-burial complex.

Typologically, the urns at Tekwada are different from the urns used in the Deccan as shown above. In placement also the two urn-burials are different—at all the neolithic-chalcolithic sites the urn-burials are found within the habitation while at Tekwada they are in a cemetery. The offering pots also show some significant differences. Firstly, while the Deccan burials contain painted black-on-red ware pots, the Tekwada burials are completely devoid of them. On the contrary, the Tekwada urn burial, invariably contain plain black-and-red ware pots which are rarely (only at Tekkalkota so far) reported from the Deccan sites. Secondly, the Tekwada black-and-red ware pots are marked by graffiti but vessels in the Deccan urn burials are not so marked. Finally, while at Tekwada not a single double or multiple urn burial is found

56. Dhavalikar, M. K., "Chalcolithic Burials : The Tekwada Evidence", *Puratattva*, vol. 2 (1968-69), p. 35.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

along with the single urn burials, in the Deccan the two are invariably found together. Before the issue is decided some of the explored burial sites in the Dhulia District of Maharastra may also be considered. They have all been explored by S. A. Sali.

At Ranjala pieces of human bones have been found in a burial-pit containing plain black-and-red ware pots with graffiti marks similar to those found on the Tekwada pots. The black-and-red ware pots at Ranjala are of forms repeatedly found in the south Indian megaliths of 1000-800 B.C., at the earliest. Sali has also mentioned a large number of other sites of the chalcolithic period but, probably, belonging to a generalized Ranjala group of burials.[57] Allchin,[58] therefore, suggests that the urn burials of Tekwada may be bracketed with the Ranjala group and dated to the same period. If that be so the Tekwada burials are removed in time also from the majority of the Deccan urn burials which are of the 15th-11th centuries B.C.

On all these grounds the proposition of Dhavalikar seems to be pretty reasonable although the evidence of the habitational phase I B, to which these burials belong, is overwhelmingly in support of the 'regional' theory since the culture-complex of I B is definitely Jorwe, although this 'Jorwe Complex' may not be identical to the one found in the Nasik-Jorwe region (Fig. 10).

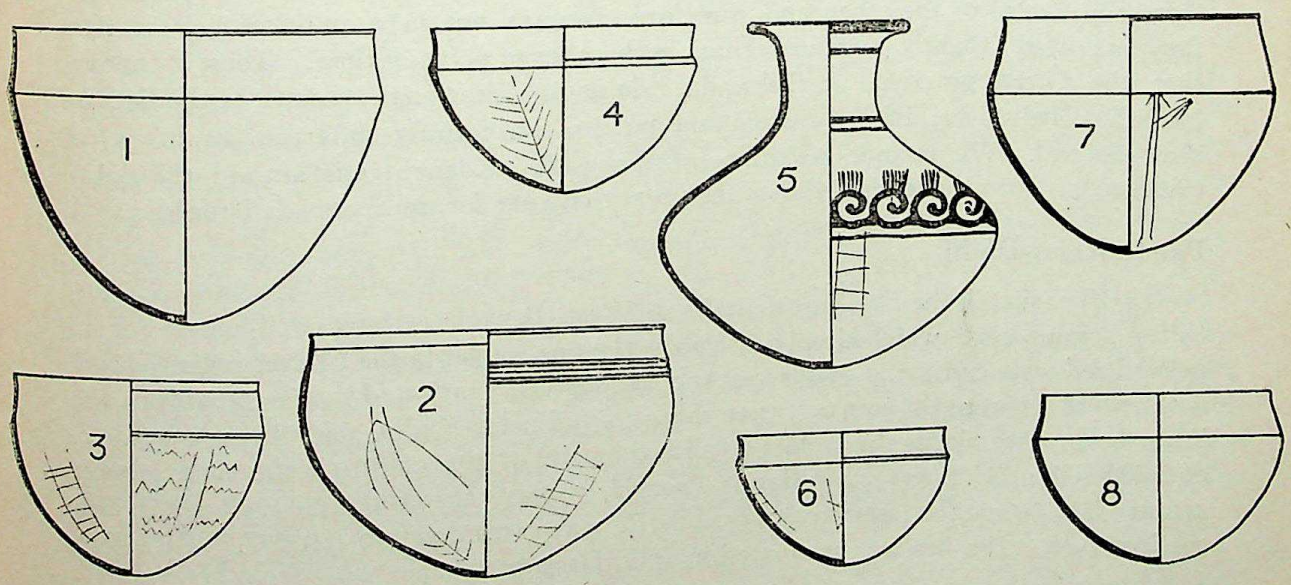


Fig. 10. Tekwada : Pottery from the graves.

57. *IAR*, 1959-60, p. 34 and *IAR*, 1961-62, p. 32.
58. Allchin, *Birth of Indian Civilization*, pp. 219-220.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Extended Pit Burials

The two extended burials found at the site were located in the yellow clay stratum, preceding the urn burial levels, and placed in the I A phase of Bahal. The Burial no. 1, of an adult, was a shallow oblong pit in which the offering of only one black painted red pot of the Jorwe ware was interred. The orientation of the dead body was north-south, as it was in the Deccan. The Burial no. 2 was a similar burial with three offering pots, one of the Jorwe ware, one of the fine grey ware and one of the white painted black-and-red ware.

The question now is whether the extended burials also belong to a different strain of culture ? Dhavalikar answers it in the affirmative on the grounds of associated wares. According to him white painted black-and-red ware and plain black-and-red ware belong to two different traditions and because the former is associated with the extended burials and the latter with the urn burials, the two burial practices are also of different strains. Here again the Bahal evidence of the culture-complex as a whole is rather against the theory. Deshpande clearly says that the painted globular vessel in Grave no. 2 belongs to I B phase,[59] i.e., of the phase to which the urn burials belong. Not only that, the different stratigraphic positions of the two types of burials are also not real. As the report shows, the two types of burials do not belong to two different layers, one sealed by the other, and, therefore, we are not in a position to assert that they are even 'slightly removed from each other in point of time'. Thus, it appears that the burial practices at Tekwada belong to a regional variant of the Deccan Neolithic-Chalcolithic burial custom and not to an entirely different 'strain' as has been claimed. We cannot consider the Tekwada evidence in isolation ; the Bahal evidence has got to be considered as the proper context for the Tekwada burials.

Pandu-Rajar-Dhibi

The site, in the Burdwan District of West Bengal, is now well-known for its cultural equipment which closely resembles the one we get in the Malwa region—black painted red ware consisting of channel spouted vessels, black-and-red ware (plain and with white paintings), copper ornaments, crested-ridge blades, microliths, beads, etc. A single C^{14} date places the middle levels (period II) of this culture in the time bracket of 1200-1000 B.C. ; the early levels (period I) may, therefore, go back to the 14th century B.C., while the later levels (period III) may come down to 700 B C., well within the Iron Age. The site was excavated by P.C. Dasgupta.[60]

59. *IAR*, 1956-57, p. 19.
60. Dasgupta, P. C., *The Excavation at Pandu Rajar Dhibi.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PERIOD I

ADULT BURIAL

There is only one human burial of an adult male which belongs to this period. Unfortunately, only the torso of the dead has been found preserved; the skull is missing. The torso was oriented east-west, and not north-south as was the practice in the Deccan. The excavator feels that it was a fractional burial but the context in which the torso was found shows that the head might have been removed accidently. The excavator himself observes that the bones were found 'within the mottled sandy silt' brought by a flood in the Ajaya on the banks of which the town was situated.[61] That the burial was a regular one is clear from the fact that it consisted of offerings which included a plain black and-red ware pot and a pot of chocolate coloured ware with paintings in white.

PERIOD II

ADULT BURIALS

As many as eight burials belonging to this period have been found, of which five are Extended Earth Burials, two are Single Urn Burials, and one is Flexed Earth Burial. The burials are marked by the absence of grave pits.

Extended Earth Burials

Two of the five burials of this category are found in Trench II E and three in Trench I C (Plate XXII). In the former while one skeleton has been found intact, the other was a disturbed one, as is shown by the photograph in the Report (pl. XLVIII A). Both the skeletons were found oriented east-west, the skull being kept towards the east. The offerings of only the latter grave have been mentioned by the excavator. They consist of two black painted red ware bowls (one with a cluster of perforations at the base and, therefore, may be a vessel used in rituals), a pair of copper bangles and a fossil-wood microlithic scraper.

Out of the three extended burials in Trench I C, the details of only two are available. One is a complete skeleton lying in east-west orientation, the skull turned to the south. Two pots, one very close to the ankle-bones and the other a little away from the skull, were the additional finds. The other skeleton is also of an adult, oriented in the same manner as the earlier one. The grave-goods in this example included a tubular copper bead and a barrel shaped bead of agate which was still sticking to the jaw-bone.

Flexed Earth Burial

The only flexed burial came from Trench 1 C. The burial consisted of a skeleton 'in slightly flexed position with arms and legs joined together.' The bones

61. *Ibid.*, p. 17.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

below the ankles 'are severed...as at Chandoli and Nevasa'.[62] No other details of the burial are available.

Single Urn Burials

The two single urn burials reported so far had the urns of 'plain fabric'. Each of them contained bones of adults (Plate XXIII and XXIII a) and they were individually covered with the lids of black-and-red ware. Besides the long bones, in one example the skull was also included. No further details are available.

The above details, when seen in the light of the Deccan burials, present some of the significant differences not visualized by the excavator. Thus, while the Deccan burials are mostly of children, the list of graves here is completely devoid of child-burials. The urn-burials, which account for 98% of burials in the Deccan, were only two in number at this site and none was a double or multiple urn burial, the types most commonly found in the Deccan. It is equally important to note that unlike the examples in the Deccan, the urn burials here did not contain complete skeletons of infants, rather they contained fragmentary bones of adults. Further, the extended burials in the Deccan were laid in oblong pits, except, probably, at Daimabad where they were found on rammed floors, but at Pandu-Rajar-Dhibi they were, as the report shows, laid just on the ground. Similarly the flexed type of burials, found at this site, are not known in the Deccan.

However, a few elements certainly exhibited common features. The dead bodies were buried within the habitation at both the places. The extended and urn burials were practised simultaneously at both the sites. The nature of the grave offerings was also the same. These similarities are, however, only broadly so and do not indicate any generic relationship between the two people.

Sonpur

The site is about 24 km. east of Gaya in Bihar and has been excavated by B.S. Verma.[63] In the level of the Chalcolithic period (IB), the excavator has discovered two burials, one was an urn burial and the other, a post-cremation pit burial.

Urn Burial

A fairly large sized urn, kept in a pit, yielded a few fragmentary bones, probably, calcined. The other details are not available.

---

62. *Ibid.*, p. 20.
63. Verma, B. S., "Human and Animal Burials at Sonpur and Chirand", Unpublished. Also *IAR*, 1959-60, p. 14, and 1960-61, p. 5.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Pit Burial

In a few pits, ranging in diameter from 1 to 2 metres and in depth 1 metre, the excavator discovered ashes, charred bones and broken pots of black and black-and-red wares of the chalcolithic types.

Chirand

The recently explored extensive mound of Chirand in District Saran of Bihar is under excavations for the last few years. Stratigraphically, the lowest culture is Neolithic with rectangular polished stone implements, including pointed axes, a large number of ground antler tools, micaceous red ware, burnished grey ware with post-firing red ochre paintings of geometric patterns, etc. The C^{14} dates available so far place it between 1900 B.C. and 1600 B.C. It has been found succeeded by the chalcolithic culture with black-and-red wares, copper object, etc. The next culture-complex is that of the N.B.P. Ware of the Early Iron Age. The excavations have yielded two animal burials in a context which seems to be the transitional phase between the Chalcolithic and the Early Iron Age (period II, phase III B, Burial no. 1 ; and period III, phase I, Burial no. 2).[64]

Burial no. 1 was 2·50 metres in diameter and 1·30 metres in depth while Burial no. 2 was 3 metres in diameter and 1·30 metres in depth. Both of them yielded post-exposure bones of the domesticated dogs, horses, etc., as well as the bones of birds, within a deposit of pots and pot-sherds. While the former included a few N.B.P. Ware sherds, the latter had only black-and-red ware pots. However, both of them had a restricted quantity of iron. It appears that the practice of post-cremation animal burial had appeared quite early in the region of Bihar. The animal burials of Chirand are, however, to be watched further since the size of the pits and the mixed nature of bones of different animals and birds may indicate that they were only the refuge-pits.

SUMMARY AND CONCLUSIONS

The culture-complex designated as 'Neolithic-Chalcolithic' combines two elements : (i) neolithic, with its focus in Karnataka and Andhra Pradesh, and (ii) chalcolithic, with its focus in Malwa, and the Narmada-Tapti basin. The people lived in small villages having round and rectangular huts. They had a 'mixed economy', depending equally on agriculture and animal husbandry. The two cultures moved in the opposite directions and soon got completely blended somewhere in southern Deccan, hence this designation.

---

64. Verma, *op. cit.*

CC-0. Panjab University Digitized by eGangotri Digital Preservation Foundation, Chandigarh

Analysing the cultural material recovered from the habition sites we find that the neolithic complex contained a few 'mesolithic' traits of the earlier period, e.g., the microliths. Similarly, the chalcolithic complex contained certain elements which characterized the Harappa culture, e.g., the technique of making the black-and-red ware and some motifs on the black painted red ware, although in both the examples the similarity may be only of a generalized nature. The burials encountered at the neolithic-chalcolithic sites are of the following types :

Adult Burials

(i) Extended pit burials.

(ii) Extended earth burials.

Bones below the ankles are found missing in a number of examples of both the types.

(iii) False extended burial, containing fractional bones arranged anatomically (in oblong pits) to simulate extended burials (Fig. 11 and 12).

Infant Burials

(i) Urn Burial containing the remains of infants laid in embryonic position (adults laid extended in urns are rare.)[65]

(a) Single urn burials; urns kept in the vertical position.

(b) Double urn burials; two urns kept mouth-to-mouth and generally placed horizontally on the ground.

(c) Multiple urn burials; three to seven urns, the two middle ones joined face to face, the others, except the ones on two ends, with broken bottoms, arranged in a telescopic fashion. They normally contained the extended bodies of grown up children (adults in rare examples),

(ii) Simple pit burials containing fractional bones.

(iii) Flexed pit burials.

The Flase Extended, Single Urn, and Double Urn burials have been found first in the neolithic context and then in the chalcolithic; obviously the latter adopted them from the former.[66]

---

65. Sankalia, however, feels 'that a child's skeleton was either exposed' (and it was a post-exposure burial) or 'it was cut up after death and distributed over the two urns'. But before this the body was smeared or anointed with cow dung and a kind of millet oil. Sankalia, *Prehistory and Protohistory in India and Pakistan*, p. 221.

66. Gupta, S. P., "Is there a Neolithic Burial Custom in the Deccan ?", *JARS*, vol. XXIX, pts.3-4 (1964), pp. 55-61.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

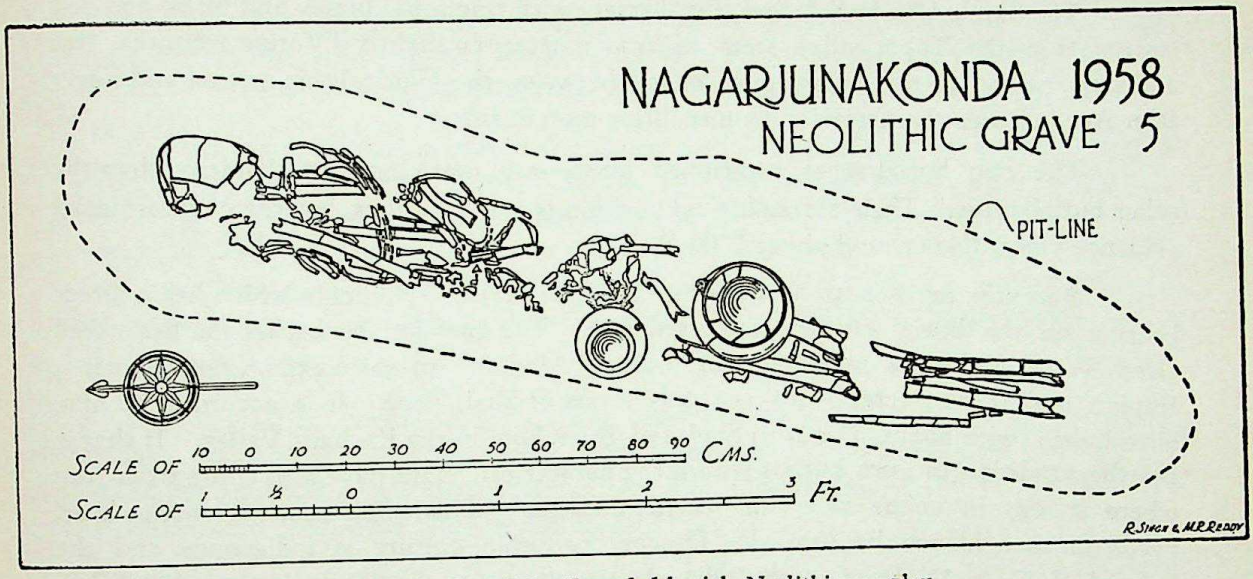


Fig. 11. Nagarjunkonda : False Extended burial, Neolithic complex

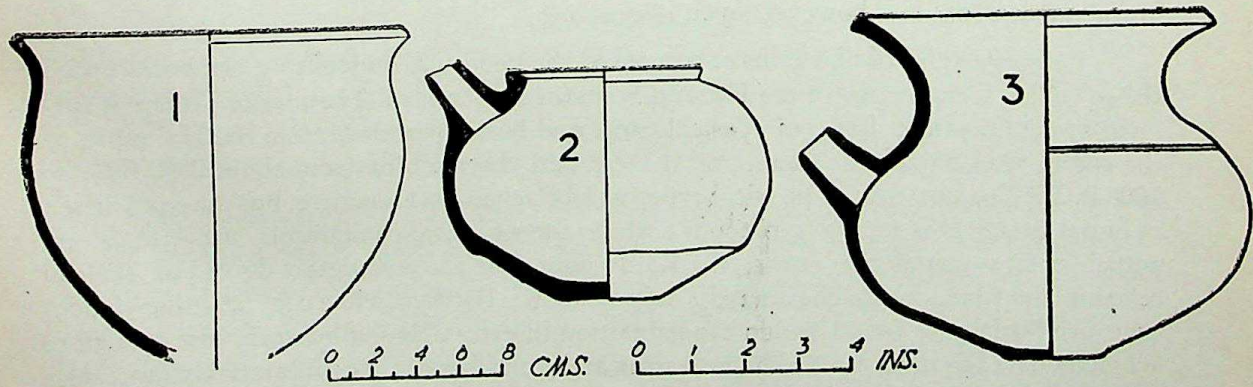


Fig. 12. Nagarjunakonda : Neolithic Burial pottery

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Single Urn burial and Pit burial with fractional bones and black-and-red ware pots in the Tapti valley seem to form a category slightly different from the rest and may belong to the transitional phase between the Chalcolithic period and Early Iron Age cultures characterized by megalithic monuments.

The two burial types mentioned above are more local in character than the other burial-types. Their chronological position is a bit dubious, but the circumstantial evidence places them round about 1000 B.C.

Recently an important question has been raised by Allchin which has a direct bearing on the burial customs discussed here. The question is whether the Burnished Grey Ware is Indian or Iranian in origin. Allchin,[65] to some extent, feels that it is Iranian and is connected with the grey wares of Shah Tepe. It is, according to him, also linked with Shahi Tump in Sind and Burzahom in the Kashmir Valley. If that is so, the tradition of 'urn burials within the habitation' might have also come from Iran where it was in vogue in a much earlier context.* This whole proposition, however, needs more evidence because the Deccan neolithic culture is indigenous and the Burnished Grey Ware of south India clearly demonstrates a typological difference with the so called similar ware in Iran. Further, after its recent discovery at Chirand in Bihar, the ware has assumed an almost 'All India character'. Moreover, the associated cultural equipment is also not the same in the two regions.

The techniques of burnishing the pots and achieving the grey colour on them are independent of the movement of a culture or even a ware in time and space. Both, independently as also jointly, are found at several places and in several contexts. What is really important, is the similarity in typology and functions of pots—these similarities in the present case are, however, open to question.

Kennedy and Malhotra have compared the neolithic-chalcolithic urn burials with the so called 'Urn-burials' of the Harappan site of Kalibangan. They write: "there is survival or continuation, both of physical types and burial practices from the Harappan to the end of the Chalcolithic times, that is for a period stretching from about 2500 B.C. to 1000 B.C.[66] The question of physical types will be taken up elsewhere, but the comparison in burial practices is totally erroneous : while the neolithic-chalcolithic urn-burials are actual coffins containing bones, the Kalibangan urns are completely devoid of skeletal remains, and functionally, they may be only symbolic. Further, while the neolithic-chalcolithic urn burials are found within the habitation in extremely shallow pits, just enough to accommodate the urns, the Kalibangan urns are found kept in a comparatively quite deep

65. Allchin, *op. cit.*, p. 168.
* See Appendix IV for West Asian parallels.
66. Kennedy, K. A. R., and Malhotra, K. C., *Human Skeletal Remains from Chalcolithic and Indo-Roman Levels from Nevasa*, p. VIA.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

pits dug in the cemetery with space enough to accommodate a large number of pots around it. There is, therefore, hardly any valid reason to suggest that the neolithic-chalcolithic urn burial practices originated in an Harappan context.

The burial practices differed from those in vogue during the Late Stone Stage also. It is natural, as the background of the two culture-complexes differs widely—the former was based upon a settled village economy while the latter upon nomadic hunting resources. Still, in one respect at least, they exhibit uniformity : the graves were dug within the habitation. Whether it was only incidentally so or the former borrowed this practice from the latter, is difficult to say. The available evidence makes it to be only incidentally so.

Some of the neolithic-chalcolithic customs were followed by the megalith-builders. Some of the early megalithic burial types such as the extended burials in pits marked by cairn-circles and single urn burials, seem to have their roots in the neolithic-chalcolithic customs of the Deccan and south India.

The neolithic-chalcolithic burial customs have been quite varied. Their study shows some regional variations and cultural preferences. Thus, marked differences are seen in the burial practices followed in the Ajaya valley, Tapti basin, Upper Godavari-Pravara valley and the middle reaches of the Krishna, etc. For example, the neolithic culture of Andhra Pradesh shows preference for single urn burials and false-extended burials in cemeteries while the chalcolithic culture of Maharashtra specialized in double and multiple urn burials and extended burial within the habitation.

The study of these burials throw light on a very important aspect of the cultural dynamics of the period, that is 'cultural hybridization' between the neolithic and chalcolithic cultures. The use of the Burnished Grey Ware urns for inhumation of infants is a neolithic practice but the Jorwe ware and copper ornaments found as offerings are chalcolithic elements. The birth of double and multiple urn burials is a phenomenon of hybridization occuring in a typical culture-contact situation.

The placement of burials in relation to the houses in the settlement assumes deeper meaning when seen in the light of the comparative absence of 'the objects of worship' in the entire complex. It appears that the formulation of religion and philosophy was beyond them but beliefs in the extra-mundane world was not wanting. In fact, they were definitely expressed in terms of burials. Love and affection played the decisive role in it, since the survivors buried the dead bodies so close to their houses and hearths that practically all the time they were not only reminded of the dead brethren but also of the 'mightier power' behind their death. It is not possible to visualize the 'form' of this power imagined by them ; it could be as gross as a totem or as subtle as the light of the sun. In this connection the cutting away of the bones below the ankles in a

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

number of examples is very significant. It might easily be assumed that it was done to cripple the ghost so that it may not come out of the grave and harass the survivors. In various tribal societies various methods are adopted to achieve this end. They are all magico-religious in purport.

A material culture exhibits its own uniformity which travels and persists in time and space. How far this is evidenced in the trait of burial practices in vogue in the neolithic-chalcolithic culture-complex is also necessary to understand. A basic uniformity in these practices is seen in the region along the lower Krishna basin. Single grey ware globular urns with flaring mouths containing complete inhumations of infants and buried within the habitation was a uniform practice. The form and fabric of the urns and the mode of the disposal of the dead remain the same when they travel to the upper Godavari basin. However, modifications were witnessed in terms of 'double' and 'multiple' urn burials. Migration and the incidents of migration are thus evidenced in the persistence as well as in the modifications that the burial practices show in these two regions.

What light the evidence of burials throws on the social structure of the people is a vital question to be answered. Unfortunately, not much can be said on this problem. Majority of the burials were of infants amongst whom rarely any stratification can be visualized to-day; the social organization runs mainly round adults. Distinctions among adults are only rarely marked—in one example the dead body was found placed 'in state under a canopy' at Daimabad, and in another example a female (?) was found placed in four huge jars at Tekkalkota. The distinctive nature of the female burial at T. Narsipur is, however, not very clear. This might show that by and large the village communities were less stratified. They were, probably, governed by the elders combindingly, and it is only rarely that the institution of 'headmanship' was adopted. Such deductions get some added validity when we do not find anything of the nature of village planning or the habitational or non-habitational structures, which may establish priesthood or kingship, etc.

The poverty of the grave-goods reflect the overall poverty of the people—there was hardly anything they used in their everyday life that did not find way in the graves—stone tools, copper objects, earthen pots, animal bones, shell ornaments, beads of different materials, and the rest. Care for the dead was taken but not over-emphasized in any case recorded so far.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 5

CAIRN BURIALS OF BALUCHISTAN

As the chalcolithic cultures gradually lost their vitality in the hilly tracts of Baluchistan, some cultural waves from Iran gave a fresh fillip to the people of Baluchistan. These waves were fully equipped with horses and iron tools and weapons, as well as handy earthen and metallic pots. Their extension towards India has sometimes been linked with the breakdown of the Hittite empire, which had virtually monopolized the knowledge of iron for over 600 years, from about 1800 to 1200 B.C. The remains of the new culture-complex are found in more than 5000 cairns, from the Zhob valley in the north (type site : Moghul Ghundai) all the way through central and southern Baluchistan, to the Baluchi and Irani Makran coasts in the south (type site : Bushire). Practically all of them belong to the Early Iron Age of the Ist millennium B.C./A.D.

Unfortunately, not much is known about the habitational pattern of the cairn builders because except for Damba Khoh on the Makran coast at no known site the habitational mound could be located. All that is known about them is known from the graves. These graves are marked on the surface by a cluster of stones. Inside them are found post-exposure or post-cremation bones along with a few items of offering. The cultural-period is, therefore, designated after these sepulchral monuments and called 'The Period of Cairn Burials'. Since cairn burials cover as vast a region as Baluchistan and as long a period as a millennium or a little less, there is bound to be some variation of one kind or the other ; structural, cultural, regional, and the like.

Structurally, the cairns could be round or oblong ; in a particular variety a circle of stones marked off the burial. Similarly, the cultural equipment collected from the graves in the southern region had painted pottery but the pots from the tombs of the northern sites have been, by and large, unpainted. Regional variations are also marked in the way the body was disposed of. In northern and eastern Baluchistan it was generally cremated while in southern regions it was exposed to the elements.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Some of the important explored or excavated cairn-burial sites may, therefore, be grouped as follows :

1. SITES IN NORTHERN BALUCHISTAN
   (i) *In Zhob Valley*
      (a) Moghul Ghundai (b) Cheparkai Hills
   (ii) *In Loralai Valley*
      (a) Tor-Dherai (b) Sur Jangal
2. SITES IN CENTRAL BALUCHISTAN
   In Quetta Valley
      (a) Quetta site No. 10 (b) Nal
3. SITES IN SOUTHERN BALUCHISTAN
   (i) *On High Land*
      (a) Zayak (b) Shahdinzai (c) Wahir (d) Mazena Damb
      (e) Kulli
   (ii) *On Makran Coast*
      (a) Jiwanri (b) Take-Dap (c) Gatti (d) Zangian
      (e) Damba Koh (f) Nasirabad.
   (iii) *In Las Bela Plains*
      (a) Kanar (b) Giyan Goth
4. SITES ON THE PERSIAN MAKRAN AND KIRMAN
   Upland plains
      (a) Fanuch (b) Sari-i-Asiab (c) Tump-i-Gabraha

The list, however, does not include sites of doubtful antiquity, e.g., a cave-burial site near Pandran, Jhalawan, with one skeleton and 25 skulls of human beings and one skeleton of a dog, because there was no antiquity with the skeletal remains, and all of them may be of recent origin.[1]

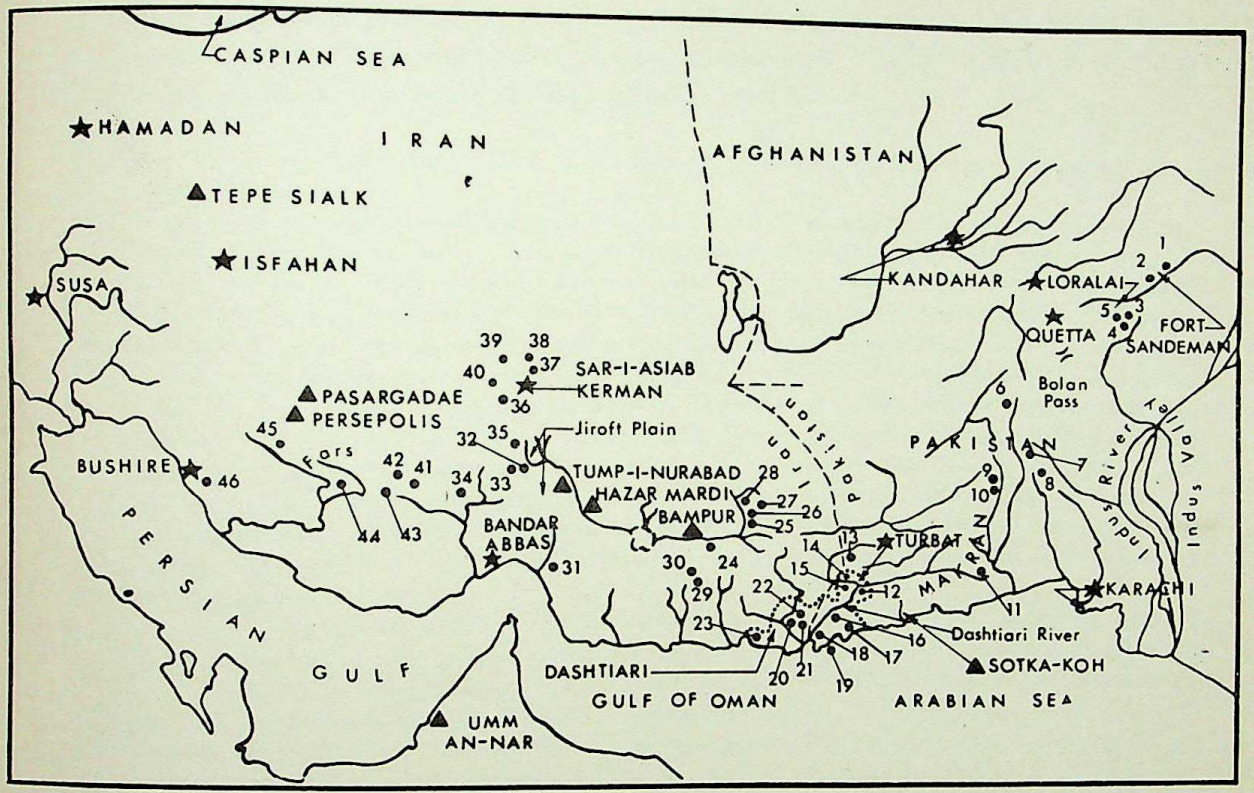
SITES IN NORTHERN BALUCHISTAN

Moghul Ghundai

The cairns of Moghul Ghundai lie on the slope of the hills situated about 49 metres away from the chalcolithic mound of the same name. They were found scattered all over the area but Aurel Stein divided them into two groups, namely : A and B, the former consisted of 40 cairns while the latter 56. All the cairns were of the round type. Out of a large number of the graves that Stein excavated during his short stay

1. Hughes-Buller, R., "Cave Burial in Baluchistan", *Ind. Ant.*, vol. (1903), pp. 242-43.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Distribution of cairns.

CAIRN BURIAL SITES

1 Periano Ghundai
2 Moghul Ghundai
3 Chaperkai Hill
4 Tordherai
5 Sur Jangal
6 Zayak
7 Nal Village
8 Panju Damb
9 Nokjo Shahdinzai
10 Mazena Damb
11 Kulli Damb
12 Zangian
13 Bit (Buleda Valley)
14 Kalatuk
15 Nasirabad
16 Suntsar
17 Gatti
18 Jiwanri
19 Take Dap
20 Basot
21 Dambah Koh
22 Ruhgam
23 Tiz-
24 near Khurab
25 Murtan
26 Baghshat
27 Sahigan
28 Kamsaptar
29 Damban
30 Rampk
31 Birinti
32 Damel
33 Darra-Shor
34 Hajjiabad
35 Tump-i-Gabarha
36 Chil-Gabri
37 Sar-i-Asiab
38 Chah Darut
39 Zarand
40 Rafshan (Dakhmai Gabar)
41 Naksh-i-Rustam
42 Dogan
43 Bishezard
44 Asmangird
45 Fattehabad
46 Bushire

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

at the site, only fifteen yielded any antiquity worth recording ; the rest, about 60, were more or less empty, entombing neither bones nor offerings. These fifteen were also extremely poor in antiquities, except Cairn nos. III and V.[2]

---

2. Stein, Aurel, "An Archaeological Tour in Waziristan and Northern Baluchistan", *Memoir, ASI*, no. 37 (1929), p. 45.

Cairn III : A small circular patch of soft earth was located under the heap of cairn stones. When dug, it was found to be a pit of about 30 cm. depth containing 'small pieces of human bones and coarse earthen ware. Most important was the fragment of a jaw-bone retaining some teeth.' [*Ibid.*, p. 46]. They were all found burnt and mixed with ash. The cairn itself was surrounded by a circle of big stones. Below one of these circle-stones were discovered 'five leaf-shaped iron arrowheads, four others with smaller points, one triangular barbed arrowhead closely resembling some, found at the Niya site and in the Lop desert (in Chinese Turkestan), and what seems to have been a knife or dagger.' [*Ibid.*, p. 47]. It is the richest collection of iron implements from any single grave but, unfortunately, it came from below a circle-stone and may not belong to the actual burial offering; these *could have been* there prior to the erection of the monument. As noted above, Stein, who had the first hand knowledge of the iron arrowheads from several sites in Chinese Turkestan, compared these weapons with some of the examples at Niya where they are datable to the early centuries of the Christian era.

Cairn V : The cairn resembled No. III in form, being conical in shape. When excavated, it also yielded ash and a coarse earthen ware pot along with 'the tip of an iron arrowhead, all mixed up with small fragments of human bones and a few coarse potsherd.' [*Ibid.*]. Nothing was found below any bounding stone, unlike Cairn no. III. The cairn may look to be extremely poor when compared with No. III but it should not be forgotten that from within the grave-pit even the latter did not yield anything better than the former.

Cairn XXX : This cairn also yielded 'a small earthen ware jar, like the one found in Cairn V.' The present example, however, is found decorated with three narrow bands of bunches of grapes, palmettes, festoons, bust of a man, etc., all executed in relief. Commenting on these decorative motifs, Stein writes : 'it is impossible not to realize the Hellenistic inspiration of the whole decorative design. [*Ibid.*]

Cairn XVII : From this cairn came three engraved bronze rings. Two of them were mere thin loops, and the third was a solidly made bezel of pointed oval shape, about 2·58 cm. long and 1·30 cm. across with two human figures—one in helmet is shown carrying a spear and a bow, with a dancing woman in skirt before him. 'The whole suggests Indian workmanship of the Kushan or Gupta period.' [*Ibid.*, p. 61]

Besides these, the following cairns also yielded a few things worth mentioning.

Cairns X, XI, XII, XXIII, XXV and XXVII yielded iron arrowheads.

Cairn XI yielded an iron spearhead.

Cairn XXII yielded a stick-like stone with a perforated end.

Cairn XXXII yielded a piece of an wooden comb with teeth on both sides.

Cairn VI yielded a well-worked small sized silver bangle with tapering ends.

Cairn VII yielded a little bronze jar with three legs. It was probably used to keep antimony. [*Ibid.*, p. 47]

Cairns X and XI yielded iron implements of uncertain use.

Stein further mentions the presence of three bronze cat-bells, a small bead of jade, and another bead of carnelian brought by a villager. He felt that they too belonged to these cairns. [*Ibid.*]

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Areas near Moghul Ghundai

About 50 metres south-west of the foot of the Moghul Ghundai mound, eight small stone enclosures have been reported. They also contained fragments of human bones together with pot-sherds of the same coarse whitish ware which was found in the cairns of the main site of Moghul Ghundai.

Areas near Periano Ghundai

Stein suspected the same type of cairns 'on bare, slightly raised, ground, about a quarter of a mile to the north of Periano Ghundai and also further away to the east of it.'

Chaperkai Hills

The site is situated about 110 kms. south of Moghul Ghundai. Stein located a number of cairns scattered over the hills but excavated only three of them. These have also been found containing small remains of human bones and fragments of the same coarse and brittle whitish earthen ware as found within the cairns of Moghul Ghundai.[3]

The excavator has not given any detailed account of the dig but the little description quoted above is enough to indicate that these cairns were of the same category as those of the Moghul Ghundai cairns.

Tor-Dherai

The site is located in District Loralai and is primarily known for a stupa. Stein observed four cairns over the low plateau to the south-east of the stupa but only three of them were excavated. They have also yielded 'only calcined bone fragments and usual coarse red ware with whitish surface.'[4]

Sur Jangal

The site is situated about 20 kms. north-west of Tor Dherai where a chalcolithic mound was located by Stein. The cairns were found about 60 metres east of it. In all, about 20 cairns were opened. They, as usual, contained calcined human bones, ash and pot-sherds. The excavator, however, mentioned the presence of a few sherds bearing painted designs 'as found on the pottery from the mound'. Along with these, a stone knife blade, of a type found on the mound, has also been reported. According to Stein: "……hence, there is some reason to believe that these cinerary deposits date from the same period as the relics unearthed in the mound."[5]

---

3. *Ibid.*, p. 54.
4. *Ibid.*, p. 70.
5. *Ibid.*, p. 76.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

If this observation is to be accepted, the cairns, at this site at least, would have to be placed in the middle of the 2nd millennium B.C. The position taken by Stein, however, seems to be a little doubtful on the following grounds :

Firstly, out of a large number of cairn sites, this is the only one whose date will have to be pushed back to such an antiquity. Unless a few more cairn sites of comparable antiquity are found one might like to reserve the judgement. Secondly, since the cairns were located practically within the outer-most limits of the chalcolithic mound, chances of a few antiquities getting into the earth-filling of the burial pits cannot at all be discounted ; people conversant with the chalcolithic mounds know it well that the habitational debris from mounds is often found scattered over a very wide area. The situation seems to be like that existing at Jeman Goth in Las Bela plains, as will be seen a little later. Finally, the excavator indicates that except for these few antiquities, the cairns, pottery, mode of the disposal of the dead, etc., were the same as at Moghul Ghundai. One would wonder as to how the objects of two entirely different dates got mixed up, except for the reason that the chalcolithic material was already there when the cairn builders erected their monuments, or else the chalcolithic antiquities found their way in the cairns along with the earth used for filling the graves which was brought from the area containing the chalcolithic debris.

SITES IN CENTRAL BALUCHISTAN

Quetta

Site No. 10. The site is situated near the modern town of Quetta. It was excavated by Fairservis who explored some 'cairns, recalling a Central Asian type'. Only one trench was laid at the site. The total deposit was 87 cm. "No artifacts were uncovered in this excavation except for some heavily calcified sherds (all of them were plain, except for several sherds of "ring ware") and the iron and bronze projectile points found in the gravels near the surface."[6]

The description is not altogether clear whether the excavator connected the cairns with the habitational deposit or not. The iron objects came only from the 'surface gravels' and, therefore, had little stratigraphic value. Nevertheless, some of them (appearing in plate no. 3I of the Report) do show similarity with those found in the Moghul Ghundai cairns, e.g., three flanged arrowheads.

Nal

The site was located near the well known chalcolithic mound of Nal in central Baluchistan. Stein explored here a number of cairns but excavated only two of them.

---

6. Fairservis, W. A.,, *Excavations in the Quetta Valley, West Pakistan*, pt. 2. p. 204.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

They yielded, as usual, calcined bones, plain red ware sherds, ash and earth. No further details have been supplied by the excavator.

SITES IN SOUTHERN BALUCHISTAN

Zayak

The cemetery is situated on a small plateau to the west of Zayak in southern Baluchistan. Numerous cairns were located here, as at Nal, but only a few were dug. The cairns were circular enclosures ' recalling the funeral cairns at Moghul Ghundai'. Curiously enough, 'only soft earth, without any deposit of bones, ashes or objects, was found."[7]

Shahdinzai

The site is located south of Zayak, in the Mashkai valley. Some cairns, 1·75 x 1·40 metres or less in height, were found below the south-eastern foot of the hill. A few of them were dug. In one of these cairns a child's skull and other bones were found. A jar and a bowl containing ashes were accompanying the skeletal remains. The pottery, as a whole, was coarse and the pots were plain.[8] The funerary nature of the cairns is well attested.

Wahir

The site is found at a distance of about 35 kms. from Khozdar. Stein discovered two cairns on one side of the main road and three circular enclosures 'touching each other in a line from south-east to north-west' on the other. These cairns had an average diameter of 4·75 metres. It is significant to note that at this site the enclosures are formed by double walls, about a metre high. The walls were made of large rough stones set in two to three courses. The space in between the two walls, about 1·30 metre wide, was found filled with gravel. Each enclosure had its own entrance from the south-east. The entrance was an elliptical passage, about 2 metres wide. It may be mentioned that none of them was excavated and their sepulchral nature has not been established In all likelihood, they seem to be the places of Muslim worship. To this function of these so called cairns our attention has already been drawn by Dales (in the case of circular enclosures on the Makran coast).[9]

Mazenda Damb

The site is located a little south of Shahdinzai and very near Gwarjak. Stein discovered a number of cairns at the site, out of which, only a few were excavated.

---

7. Stein, Aurel, "An Archaeological Tour in Gedrosia", *Memoir, Asi*, no. 43, p. 34.
8. *Ibid.*, p. 153.
9. *Ibid.*, pp. 148-50. Dales, F. G., "A Search for Ancient Seaports", *Expedition*, vol. 4, no. 2 (1962), pp. 2-10.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

These were found to be yielding burnt bones, ash, coarse pottery and, in one example, a fragment of copper.[10]

Kulli

It is a well known chalcolithic site near Kolba in southern Baluchistan. On the ruins of the old habitation were found cairns erected in two groups. On digging some of these cairns, only loose earth, caclined bone-fragments and plain pottery pieces were found.[11] The evidence is in conformity with that collected at other sites in northern and southern Baluchistan.

SITES ON THE MAKRAN COAST

From near the confluence of the Kej and the Nihang and all along the Dasht, coming right up to the modern wayside seaport of Gwadar on the Makran coast, a number of cairn-sites were reported by Major Mockler.[12] Some of them were revisited and excavated by Stein,[13] Henry Field[14] and Dales.[15] The cemeteries on these sites are larger in size than those on the northern sites. They contain not only more cairns but the cairns themselves are more varied in form and size than those found at other sites. As far as the cultural matrix of these sites is concerned, that too is astonishingly different from that in the Zhob valley. In fact, inspite of an underlying uniformity in the form of the cairns, the cultural differences between the two groups are more marked than the similarities observed between them. Excavations at half a dozen sites and of more than three to four hundred cairns have given us a fairly good idea about the morphology and cultural content of the graves, about the mode of the disposal of the dead and the treatment meted out to skeletal remains.

Jiwanri

The site is situated on the sea coast, about 60 kms. south-east of the famous Harappan site Sutkagendor. The cairns are clustered in two groups, each of them containing about 200 graves. Stein excavated 178 of them while 11 were dug by Major Mockler.

The cairns are nearly a metre in height and "consist of an enclosure formed by building up walls with rough pieces of the hard calcareous sandstone found on the

10. *Ibid.*, p. 80.
11. *Ibid.*
12. Major Mockler, "On Ruins in Makran", *JRAS*, 1877, pp. 121 ff.
13. Stein, *op. cit.*
14. Field, Henry, *An Archaeological Reconnaissance in West Pakistan.*
15. Dales, F. G., *op. cit.*, *Expedition*, vol. 4, no. 2 (1962), pp 4-10.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

spot around an earth filled interior varying from 3 to 5 ft. in diameter."[16] The cairns here were round, oval and quadrangular in shape When the cairn was oval its longer axis could be 3 to 4 metres. The 'Quadrangular Cairn' is the same as Mockler's 'square shaped' cairn. None of them contained an 'entrance', i.e., a small gap in the enclosure, as was suspected by Mockler.[17] He, however, had dug two 'Square Cairns' and nine 'Round Cairns'. The earth filled the interiors of these cairns contained not only very small fragments of different bones but also large fragments of thigh and arm bones, knee caps, etc. It is important to know that neither the bones showed marks of burning nor any pot has been found containing ash. The natural assumption, therefore, is that the bones were of post-exposure nature, as against those found at Mogul Ghundai where they were all calcined due to burning.

Mockler had reported 'scraps of iron' in all the 11 cairns he opened. Stein, however, found a thick iron fish-hood in one cairn and trinklets in several others.[18] Stein also discovered 'two well preserved copper bracelets or anklets with simple incised designs placed over the mouths of two small jars.'[19] Further, a copper ring with a bezel has also been reported in one of them. The excavator also discovered 'several thin silver rings from different cairns'[20] Mockler had found in one round cairn, two copper bracelets (of snake-head pattern) and in another a large copper vessel.[21] The cairns have presented us with several characteristic pots and pot-sherds of coarse dull red ware. Some of the important types of pots are (i) flat bottomed vessel (ii) narrow mouthed flask (iii) flat bottle with three ears on the circumference (iv) spouted vessel, (v) 'lota' shaped pot (vi) small flat dish of hard grey ware, and (vii) small jar. The pots are both handmade and wheel-turned. Many of them were beautifully painted in black or dark buff. Stein feels that the paintings were of post-firing nature because they are easily rubbed off. The designs included scrolls, volutes, parallel bands of simple wavy lines, vertical hachures, parallel bands, etc.[22]

Take Dap

The site is only 6 km from Jiwanri and is situated on a flat coastal plateau. A group of 32 cairns, each a little less than 3 metres in diameter, was found here. The cairns were 'roughly circular heaps of stone blocks collected on the spot' and they 'rise

16. Stein, *op. cit.*, p. 78.
17. Mockler, *op. cit.*, pp. 127 and 132.
18. Stein, *op. cit.*, p. 79.
19. *Ibid.*, p. 81.
20. *Ibid.*
21. Mockler, *op. cit.*, p. 132.
22. Stein, *op. cit.*, p. 80.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

to a height of 2 to 3 ft.' Stein excavated a few of these cairns and found only fragments of uncalcined bones in the central part of the burial-pit filled with loose earth.[23] In all probability it was a site where people followed the custom of post-exposure burials (Fig. 14 : 3).

Gatti

The site is located near Gwadar, slightly north of Jiwanri, at the foot of the Jabal-i-Mahdi hill on the sea coast. The cairns were found clustered in two groups namely of 14 and 41 respectively. Their diameter ranged between 1·75 and 2·30 metres. They were 30 to 60 cm. in height. Only half-a-dozen of them were examined.[24] The cairns were usually found concealing a patch of earth containing uncalcined bones, coarse and unpainted pottery and pieces of copper and bronze vessels. Some fragments of iron also were found in them. Significantly enough, they also yielded a green glazed and ribbed ware which 'date from early historical times'. Major Mockler had earlier reported some fragments of an iron pot and 'a green glazed bottle...with frangments of iron and bones.'[25]

The above details make it clear that unlike their counter-parts in northern sites, people here buried only post-exposure bones. Further, that the cairns here yielded a green glazed ware which possibly belonging to the early centuries of the Christian era.

Zangian

A little north-east of Gatti, about 9 km. south of the famous chalcolithic cemetery of Shahi Tump, on a low hillock, called Zangian, were located a little only more than 500 cairns. Stein excavated, 69, in course of three days. (Fig. 13).

In shape, the cairns here were similar to those found at Jiwanri. 'Their walls of roughly heaped up stones usually form irregular oblongs with an approximate east to west bearing, and enclose earth filled spaces from 5 to 8 feet in length and 2½ to 3 feet wide'.[26] (Plate XXIV) They have yielded fragments of burned human bones and coarse red ware pots. The pots, from 1 to 6, were usually placed near the eastern end, about 63 cm. below the top. The pottery resembles the types found at Jiwanri; flat pots with small spouts were of common occurrence. A few pots had handles, a few had ears, and one had a long vertical spout. The paintings on them included loops, scrolls and bands in buff, red and black. The other pot decorations included incised zigzag lines.

The cairns have yielded copper and iron fragments also. From Cairn no. II, viii was picked up 'a badly rusted and broken blade of a large sword, and a damaged

23. *Ibid.*
24. *Ibid.*, p. 75.
25. Mockler, *op. cit.*, pp. 132-33.
26. Stein, *op. cit.*, p. 87.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

iron weapon with a bronze fastening at the hilt. The other antiquities include decorated bone or shell disc, a pottery ring, a few stone beads and a dog like toy.[27]

Fig. 13. The Cairn Burials at Zangian.

27. *Ibid.*, p. 88.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Horse-skulls

Interestingly enough, Cairn nos. 1, II, XX and XXXIX have yielded a horse's skull each. However, none of the two showed any sign of burning. Stein suspects in it the 'immolation of a favourite mount.'[28] Even if one may not agree with his interpretations the association of the horse with the cairn people is firmly established by this evidence.

Damba-Koh

About 65 kms. westward of the famous Harappan sea-port of Sutka-gen-dor is the well known cairn burial site of Damba Koh. It was first explored and excavated by Maj. Mockler[29] in 1876. Later on, Stein conducted further excavations at the site.[30] In the cemetery, situated on the slope of the hill, about 2000 cairns were counted. They were of two types : (Fig. 14 : 2)

(1) Rectangular (called 'Square' by Mockler), and

(2) Round or oval

Rectangular cairns

Rectangular cairns are built with dry walls of stone slabs, rising to a height of 1·30 to 1·63 metres according to Stein, and up to 2 metres according to Mockler. The outside maximum length is slightly less than 2·30 metres and width 2·85 metres. Stein does not indicate the length of the top, although Mockler gives it as a litttle more than 2 metres. The width has generally been 2·30 metres. It was supported by a lintel stone of about 70 cm. in length, and was also covered with stone slabs. The interior was reached by a small entrance facing the hill. Sometimes the entrance faced to the west or the north. The entrance, 61 cm. broad, was generally made in the longer wall.

The details given above indicate that the burial monuments were somewhat tapering in elevation that was perhaps necessary for building such massive structures without the use of mortar. Mockler, however, felt that mud was used not only in joining the slabs but also in plastering the surface of the walls.[31] He also pointed out that 'the interior of these structures is somewhat dome-shaped'.[32] The largest monument measured was 3·60 metres long, and the smallest 1·30 metres long.

---

28. *Ibid.*, p. 88.
29. Mockler, *op. cit.*, pp. 121-34.
30. Stein, Aurel, *Archaeological Reconnaissances in North-Western India and South-Eastern Iran*, pp. 73-78.
31. Mockler, *op. cit.*, p. 127.
32. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Round (or oval) cairns

The round or slightly oval cairn is a structure of dry walls of stone slabs, the interior being filled with earth. In this example also the walls were slightly tapering upwards. However, the top was not roofed and there was no entrance in the wall. Mockler opened 5 rectangular and 4 round cairns,[33] while Stein opened 42 of them.

OFFERINGS

Earthen vessels : Mockler found in one of the cairns a small pot, fragments of a large one, some reddish hair and a piece of bone. In other cairns he got no bones but a flask and a few lipped spouted pots. Stein, on the other hand, has reported post-exposure bone-fragments in all the cairns he excavated. Flask and lipped spouted pots were also found by him. Some of these pots were with handles as well as ears for passing cord. Several pots 'show coarsely painted annular and wavy lines with hatching. One of these pots is very characteristic for dating the cairns. It is 'the jar no. II. vi. 75 (Plate III) with high loop handle, one side of which is shown a pair of animals, perhaps meant for tiger or hound, modelled in the round and standing on their hind legs.'[34] Exactly the same pair of animals, placed precisely in the same manner over the neck, is found in several examples of earthen vessels from Yotkan the site of ancient Khotan in southern Chinese Turkestan.[35] These pots are dated to a period between the first and the third centuries A.D.[36] Stein also found a number of green glazed potsherds 'within some cairns and outside.' Some of these glazed pots also indicate the same time bracket as above.[37]

Iron objects : Stein discovered 'in a few cases very thin iron vessels.....one iron tumbler',[38] and other pots. In one instance he also found two javelin-heads.

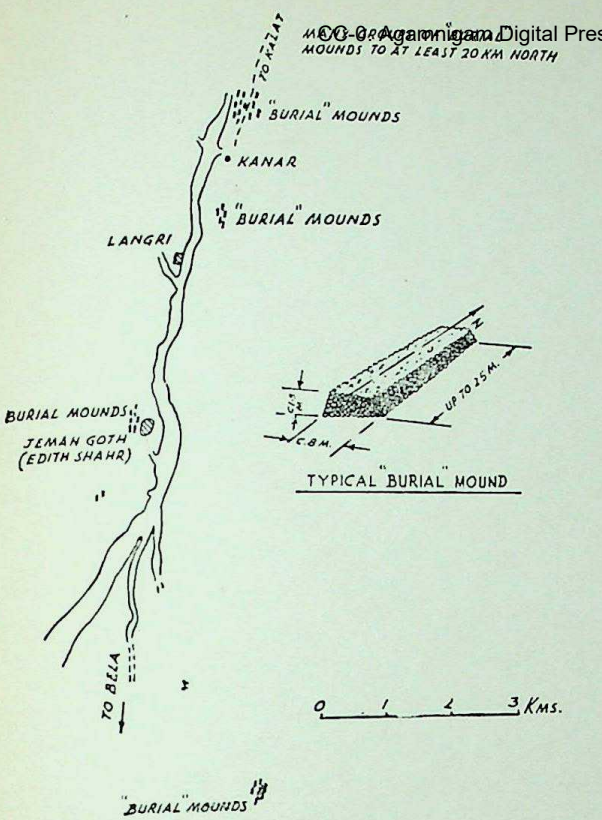
Coins : From Cairn no. II. ii, Stein discovered a copper coin, which J. Allan identified as an 'issue of Sinatruces (77-70 B.C.).' Another cairn yielded a coin of Yazdagird III, a ruler of the 7th century A.D.[39]

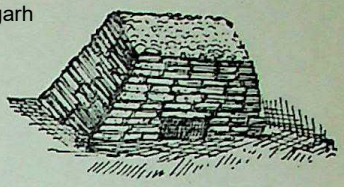
HABITATION SITE

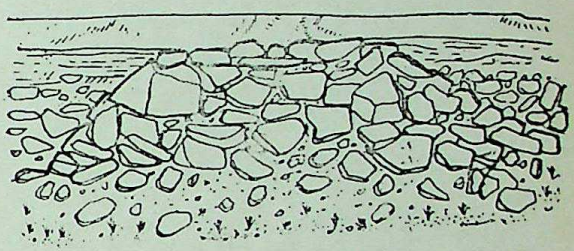
The site of Damba Koh has assumed a unique place amongst the cairn-burial sites because just on the outskirts of the cemetery and on the slope of the hills is situated

33. *Ibid.*, p. 129.
34. Stein, *op. cit.*, p. 76.
35. Gupta, S. P., "Terracotta Vessels and Figurines from Khotan (Central Asia) in the Hermitage Museum, Leningrad", *JOIB*, vol. XVII, no. 2 (1967), p. 170.
36. *Ibid.*
37. Stein, *op. cit.*, p. 76.
38. *Ibid.*
39. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh







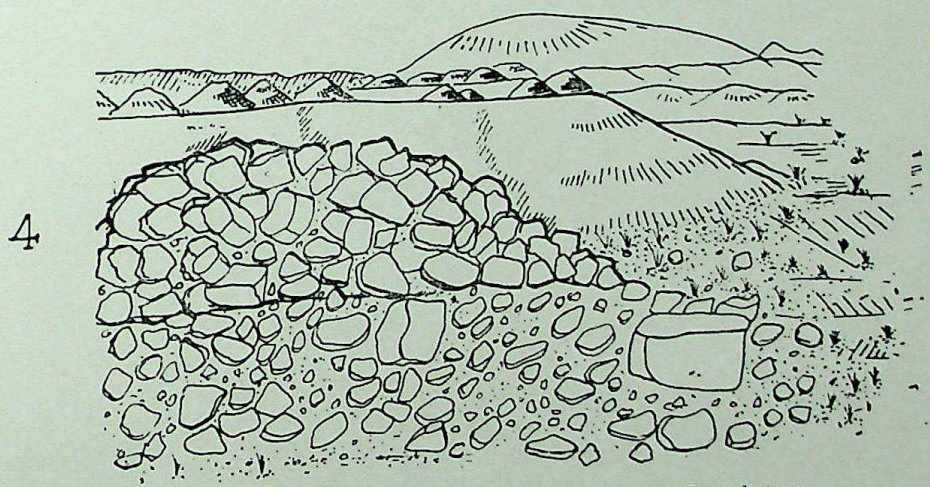


Fig. 14. (1) *Las Bela plains and location of cairn burial sites*
(2) *Damba-Koh, 'Rectangular' and 'Round' cairns*
(3) *Take-Dap, a cairn burial*
(4) *A typical cairn in Abu Dhabi*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the habitation of the people who buried their dead in the cairns. The excavations have revealed the existence of rubble walls of a number of small rooms set in double rows. The material that the rooms yielded is the same as from the cairns, pottery, beads, shell rings, iron pieces, etc. Mockler had also found an inscribed coin of a Parthian king,[40] which strengthens the evidence of the copper coin found by Stein in a cairn mentioned above. Apart from these, an iron ring, a silver ear-ring, and some beads of glass have been found in the rooms. They have also the same dating value.

The flat flask found here was also commonly used in the early centuries of the Christian era at Taxila, Khotan, etc. although one example comes from Necropolis B of Tepe Sialk of the early Ist millennium B.C.[41]

Nasirabad

Slightly west of Shahi Tump, about 6 kms. north-west of the junction of the Nihang and Kej rivers, 72 to 100 cairns were located by Stein. They were about 61 cm. high. In all, half-a-dozen of them were excavated and all of them yielded small fragments of human bones. The excavator, however, has not mentioned whether the bones were burnt or not. In any case, looking at the evidence in the context of other sites in the Persian Makran they may be post-exposure in nature. The pottery consisted of coarse red and buff wares. In one of the cairns three full pots of coarse red ware were found. One of the cairns yielded fragments of iron implements.[42]

SITES IN THE LAS BELA PLAINS

Jeman Goth

A little to the north-west of Karachi is the lowland plains of the Indus, known as the Las Bela plains. It is quite a fertile land as opposed to the Makran coast which is largely sandy and dry (Fig. 14 : 1).

In the Bela plains there is a Kulli-Harappan site known as Jeman Goth. "There are immediately west of this site and probably built over part of it, a number of stone burial (?) mounds...It is worth noting that the rubble filling of the mounds at Jeman Goth consists of potsherds and rubbish from the main site : this idicates a later date for the mounds."[43]

---

40. Mockler, *op. cit.*, p. 130.
41. Ghirshman, R., *Fouilles de Sialk*, vol. II, Plate. LXXIV, S. 913.
42. Stein, Aurel, "An Archaeological Tour in Gedrosia", *Memoir, ASI*, No. 43. p. 86.
43. Raikes, R., *Archaeological Explorations in Southern Jhalwan and Las Bela*, p. 156. See also the sketch map of the location of the sites and the drawings of a typical burial mound.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

A typical burial mound at this place is a rectangular enclosure of rubble, bounding earth and rubbish. The largest recorded enclosure is 25 metres long, 8 metres broad and 1·5 metres high; the longer axis runs north-south. Mere size and orientation of the monuments in this area claim a separate category for themselves since the Makran coast cairns are hardly 3 metres long, 1 metre broad and 1 metre high. In case orientation has also to be considered, it may be indicated that while the Las Bela cairns were oriented north-south, the Makran cairns were oriented east-west.

Kanar

A little north of Jeman Goth, on the road to Kalat, is the village Kanar. About 40 cairn mounds are found here. "All the mounds are long, varying from about 8 metres to 24 metres, all are about the same width of 6·5 metres, all are aligned due north and south. The method of construction is in every case the same. Except as burial mounds they do not seem to have any *raison d'etre*."[44] Unfortunately, none of them has been excavated to give us any idea of their contents.

Some other sites in the Las Bela plains

There are several other sites of similar nature in the Las Bela plains. "At Giyan Goth there are about thirty of these mounds ; at Kadr Bad (Sinchi Bent) about fifteen ; at Windri, on the Porali, a few ; at sites along the Kud, south of Mai Gundrani a total of about forty, including one that has not only the walls built but no filling, while the rest have not only been filled but also covered with gravel. Adjacent to these last were plain pot-sherds and a number of apparently worked rough flints."[45] When excavated they produced 'ribbed pots', [46] i. e., pots over the body of which fluting and ribbing alternate. This is produced by fingers pressed on the clay lump rotating on a fast moving wheel. Thus, on the Persian sites wheel-turned pots have been more frequently found than on any Baluchi site ; in fact, on the Baluchi sites the pottery reported is, by and large, handmade.

SITES IN PERSIAN MAKRAN AND KIRMAN REGIONS

As we move westward from the valley of the Dasht, particularly, inland towards Kirman, cairn sites start yielding certain types of pottery and other antiquities which are not identical with those found on the Makran coast although a few types between them are common. As far as the burial monuments are concerned, they exhibit almost the same features as those in Baluchistan—they are either round or oval

44. *Ibid.*
45. *Ibid.*
46. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

or rectangular. The bones found in them are, of course, of post-exposure nature; cremation being not attested in any example, so far.

Here, more than a dozen sites have been reported by Stein.[47] He has not given sufficient details because no excavation was carried out at these sites. He has, however, very significantly mentioned that if reports from villagers are to be believed all along the roads from Persian Makran to Kirman and beyond there are cairn burials.

Sari Asiab

This is a site with 18 big and small cairns found in a cluster. They range in diameter from 4·30 metres to 1·30 metres and in height from 61 cm. to 1 metre. All of them produced human bones. In one of the cairns two large earthen pots, full of bones of birds and beasts, were found.[48]

Fanuch

This is a typical Persian Makran site excavated by Stein. About 120 cairns were located here, out of which 22 were opened. The excavator writes : "these were in close agreement with those found at Damba Koh. Practically in all the cairns there were bone fragments.....associated with pottery."[49] The pottery, on the one hand, includes a flat flask with four lugs (as at Jiwanri) and, on the other hand, a large bowl-on-stand which has no parallel in Baluchistan cairns. The other antiquities include a glass stilus, a silver ornament, 'a portion of a folded silver plaque which might have belonged to a buckle.' There seems to be a little increase in the amount of silver objects in the cairns on the Persian Makran sites.

Tump-I-Gabraha

The site is located farther inland, about 3 kms. south-east of Daultabad. Except for two round cairns, which somehow escaped vandalism, others were found destroyed.[50]

SUMMARY AND CONCLUSIONS

During the first millennium B.C. some iron using people inhabited the highlands and the coastal plains of Baluchistan. They knew horse breeding as well as cattle keeping. Not much is known about their habitations but their graves have yielded some valuable material to throw light on the people and their culture.

47. Stein, Aurel, "Archaeological Reconnaissances....." p. 102.
48. Lamberg-Karlovsky, C.C., *et al.*, "The Cairn Burials of South-eastern Iran", *EW*, NS. vol. 18, (Nos. 3-4) 1968, pp. 269-76; Also, Stein, *op. cit.*
49. *Ibid.*
50. *Ibid.*, p, 103.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

These graves are in the form of heaps of stones known as cairns. These cairn-burials are round, although rectangular examples are not wanting. They are found concealing a small shallow pit containing cremated bones, pot-sherds and ash or, post-exposure bones and pots. Sometimes animal bones and selected objects of glass and semi-precious stones have also been reported from them. Broadly, they are divisible in two groups : (i) those in Northern Baluchistan, and (ii) those on the Makran coast. The northern cairns are characterised by post cremation burials and unpainted handmade pots while the coastal cairns are marked by post-exposure burials, and painted pots, both handmade and wheel-turned.

The cairn burials are also found on the Persian Makran and the Kirman region of Iran. By and large, they are akin to those found on the Baluchi-Makran coast but the earthen pots in some of them are of shapes not found in the Baluchi cairns. The Iranian cairns are generally bigger in size than those in Baluchistan.

Some cairns are also found in Sind. They are located a little north of Karachi, in the Las Bela plains. They are long rectangular cairns and, although, none of them has been excavated so far, they have, according to the explorer, 'no reason to exist except as sepulchral monuments.'

The cairn burials present a number of problems, the foremost among them are two : (i) What is their chronological bracket ? (ii) Where did they originate ?

CHRONOLOGY

The upper limit of the cairn burials definitely falls in the early centuries of the Christian era because of the following evidences :

(a) Two coins, one of Sinatruces (77-70 B.C.), found at the cairn burial site of Damba Koh, have been dated to the Ist century B.C.

(b) In a number of cairns a green glazed ware has been reported. It has also been dated to the early centuries of the Christian era.

(c) The glass objects found in some cairns do not seem to be of a variety which may be placed earlier than the Ist century A.D.

(d) A Greaco-Roman intaglio and an earthen vessel with raised Greek or Kushan designs may also not be older than the 1st century A.D.

(e) A round earthen pitcher from Damba Koh has two handles, one shaped as a pair of tigers. The device is exactly the same we get on some of the earthen pots from Khotan (Central Asia) of the early centuries of the Christian era. (Fig. 15 : D)

(f) Travellers' earthen flask with two strap—handles and lotus decoration. It is a type of pot found at Taxila of the early centuries of the Christian era.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

To fix the lower limit is, however, not that easy. Miss Cardi suggested the date to be 1000-800 B.C. The suggestion is based upon the supposed 'impact of the

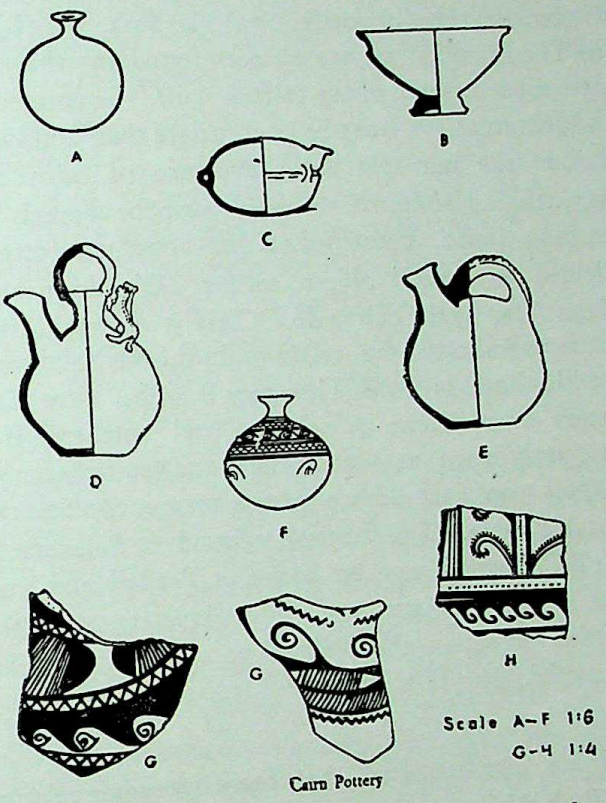


Fig. 15. Pottery from Cairn burials. No. D has a pair of tigers used as a handle

Necropolis B pottery' on the pottery from the cairns on the Makran coast. This suggestion started with Miss Cardi's discovery of a black painted red ware, called 'Londo Ware', at a number of sites in central and southern Baluchistan. This pottery has been dated to 1200-1000 B.C. 'on account of its affinities with Persian pottery' of Necropolis B of Sialk. The affinities are as follows: (a) both are with horsemen representations, and (b) both are with other common animal (geese) and geometrical (volute) designs. Some sort of a vague connection of this ware with that found in the cairns has been visualized implying a date of 1000-800 B.C. for the cairns.[51] In this connection it may be worthwhile to refer at length to the salient points mentioned by Cardi since they indicate the limitations of the hypothesis :

51. Cardi, B. C., "A New Prehistoric Ware from Baluchistan" *Iraq*, vol. XIII, pt. 2 (1951). pp. 64-73.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

(i) On the evidence of pottery she writes : "in both Northern Baluchistan and in the region of Gwatar Bay cairn burials are found with bronze objects and pottery which, though clearly related to Cemetery B at Sialk, bears no resemblance to Londo ware."[52] The two common types of pots are: (a) Flat flask, and (b) Jug with flattened fan-shaped spouts. (ii) The Londo Ware has not been found anywhere on the Makran coast, the area of greatest concentration of the cairns. (iii) The painted pottery of the cairns, found only in the Makran cairns, 'may be later in date than Londo.'[53] (iv) 'No bones were noted on the Londo site nor was there evidence of cairn or other burials in the immediate vicinity...the only cairns recorded near the mound Zayak, on which the (Londo) ware has been found, contained neither bones nor pottery.'[54] (v) Not a single Londo site has yielded any metal object, so far. We do not definitely know if they belonged to the Iron Age, as the cairns do. Clearly enough, Miss Cardi does not bring in the Londo Ware to indicate the relationship of the Makran Coast cairn-pots and painted designs with those in Sialk Cemetery B. She visualizes a direct relationship between the pottery of southern Baluchistan and northern Iran which is absolutely hypothetical, particularly when we look at the space gap between them. Not only that, the two types of pots mentioned above have a very long history and may not have in themselves any datable value. The flat flask is found in Palestine in levels ranging from 1600 B.C. to 1200 B.C.[55] and it is also found at Taxila[56] and Yotkan[57] in the levels of the early centuries of the Christian era. The whole argument, therefore, rests on the representation of the horse on the Sialk B pots and Londo Ware pots. It may, however, be emphasized that this representation is not found anywhere on the cairn-burial pots.

Miss Cardi has also suggested that there was some relationship between Sialk Cemetery B and Zhob Valley cairns, particularly, those at Moghul Ghundai, on the following considerations :

(i) 'The link between the Zhob sites and Sialk can be traced through Nad-i-Ali in Afghan-Seistan where a characteristic Sialk B long-spouted vessel was found with polychrome pottery.'[58] (ii) A small bronze pot with three legs found both at Sialk and at Moghul Ghundai. (Plate XXV) (iii) Horse bells of bronze found at both the places. (iv) Expending bracelet. However, these items have been treated individually

52. *Ibid.*, p. 71.
53. *Ibid.*, p. 66.
54. *Ibid.*, p. 64.
55. Rainey, Froelich, "The Museum Expands", *Expedition*, vol. 5, no. 1 (1962), pp. 6 and 38.
56. Marshall, J., *Taxila*, vol. III, pl. 122, figs. 44 & 45.
57. Stein, Aurel, *Innermost Asia*, vol. III, pl. 1.
58. Cardi, *op. cit.*, p. 71.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

by isolating them from their real original context. It may be mentioned that the associated material is datable to the Ist century B.C./A.D. if not still later. One wonders if a single pot at Nad-i-Ali,[59] which is also not a cairn burial site, is enough to present the evidence of pottery in the present context. Horse bells are certainly ill secured in dating other antiquities. The expanding bracelet has been dated to the middle of the Ist millennium B.C. by Gordon.[60] The bronze triped pot is more akin to the one found at Sirkap, Taxila, than to the one found at Sialk.[61]

N. R. Banerjee has quoted the evidence of trilobate type of iron arrowheads found at Moghul Ghundai to trace back the antiquity of the cairns to 800 B.C. Although one may agree with him and Miss Cardi that they are found at Boghaz Keui and Alisar Huyuk in Asia Minor in the Iron Age levels datable to the middle the first millenniun B.C.[62] still one would doubt if a similar date can be assigned to those found at Moghul Ghundai (Plate XXVI) because of the following reasons :

(i) There is a big space gap between Asia Minor and Baluchistan, so much so that even Sialk, the supposed link between India and Western Asia, has not got a single example of this arrowhead.

(ii) At Taxila and other places this type of arrowhead was popular during the early centuries of the Christian era and not before that, as is known from the evidence gathered, so far.[63]

(iii) A number of identical arrowheads have been reported from Niya, Chinese Turkestan, in the context of the 1st-3rd centuries A.D.[64]

(iv) As has been shown earlier, these arrowheads came not from within the cairns but below a single bounding stone, and may not at all be related to the cairns.

(v) However, at Tepe Yahya, in southern Iran, they are also found in the Achaemenian levels of period III.[64a]

The above discussion clearly shows that although individual items may show some similarities with objects found in Western Asia of 1000-800 B.C. period, they are rarely the fossil types since they do continue till the early centuries of the Christian era. One may argue out the case either way. Tentatively, therefore, some of the cairns may be as old as 800 B.C., as Cardi and Banerjee feel but certainly a large number

---

59. *Revue des Arts Asiatiques*, vol. XIII (1939). Plate IV, N. A. 85.
60. Gordon, D. H., *Prehistoric Background of Indian Culture*, p. 160.
61. Alcock, A., "The Dark Age in the North-West India", *Antiquity*, no. 102 (1952), p. 93.
62. Banerjee, N. R., *Iron Age in India*, pp. 45 and 48.
63. (a) Gupta, S. P., "Arrowheads : Its Technology and History", *JBRS*, vol XLVII (1961), pp. 129-138.
    (b) Marshall, J., *Taxila*, vol. III, Pls. 165 and 206.
64. Stein, A., *Serindia*, vol. I, p. 250.
64*a*. *Iran*, vol. VII (1969), p. 185.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

of them belonged to the early centuries of the Christian era. Lamberg Karlovsky feels that 'such evidence as is present suggests a late 1st millennium B.C. date'[65] for the cairns. I would personally place them between 600 B.C. and 500 A.D. : the period of their greatest popularity, however, should be bracketed between 100 B.C. and 300 A.D.

ORIGIN

Agreeing that some of the cairns could be of the middle of the first millennium B.C., one would like to know if this tradition did not come from outside. As the evidence exists to date it is possible that their origin lies in the practice of erecting cairns in Southern Arabia and the Persian Gulf islands. There, they belong to two different periods: (i) Bronze Age (later part of the 3rd and 2nd millennia B.C.), and (ii) Iron Age (from 1000 to 600 B.C.). The sites with cairn burials cover practically all the South Arabian States of Aden, Yemen, Oman and East Arabian States of Katar, Abu Dhabi (Fig. 14 : 4), Behrain, etc.

We are here concerned with the cairns of the later period (1000-600 B.C.), i.e., the Iron Age. The date has been fixed on the basis of Himyaritic inscriptions on some of the cairns, e.g., those near Jejran. In this connection, Bowen[66] has quoted the observations of a number of explorers. Thus, Philby found them in thousands and called them 'Pill Boxes'. They were circular, usually built of flat limestone slabs (2 to 10 cm. thick, varying in size, upto 8 metres in diameter and 3 metres in height). Many of them, however, were 'just heaps of stone no more than a metre high.'[67] Miss Meulen also reported these circular cairns in Northern Jol.[68] H.J. Carter found them on the southern shores of Arabia.[69] Bown himself discovered hundreds of them in areas around Wadi 'Adim in Hadramaut, south of Sah. Sometimes a cairn with battered sides consisted of crude chamber with a vaulted roof and with smaller rocks piled on top of the vault forming rock mounds or pill-boxes as the case may have been.[70] These seem to be similar to those found at Damba Koh on the Makran coast.

There appears a little space gap between southern Arabia and Irani Makran, but it may be due to the paucity of our own explorations on the Makran coast. It is known that all areas which were explored by Stein and others yielded the cairns, and

65. Lamberg Karlovsky, *op. cit.*, p. 276.
66. Bowen, R.L., *Archaeological Discoveries in Southern Arabia*, pp. 64 ff.
67. Philby, J.B., *Sheba's Daughters*, pp. 373-78.
68. Meulen, D. Van der, "Aden to Hadhramaut and Journey to the Coast", *Geographical Journal*, no. 93 (1939), pp. 122-23.
69. Carter, H.J., "Geography of the South-West Coast of Arabia", *Jr. Bom. Br. R.A.S.*, vol. III (1851), pp. 262-63.
70. Bowen. *op. cit.*, pp. 65-66.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the unexplored areas up to Arabia may reasonably be expected to contain them. In all likelihood, therefore, the Iron Age cairns originated in southern Arabia, moved north-eastwards along the coast and entered into Baluchistan through the Makran coast.

As has been said earlier, the cairn burial sites are known to us only as cemeteries, we are more or less in the dark regarding their habitations. At Damba Koh, however, double rows of small rooms built of rubble walls have been discovered by Major Mockler. These might have belonged to the people who buried the dead body in the cairns. In any case, the picture offered is of a settled but not developed society. Probably, by and large, the people were on the march, occupying difficult terrains and living on bare minimum. They had, however, two superior assets on the natives—one was the effective control of iron technology and the other the horse. Both of them are attested in the graves. With the help of these two items they are likely to have conquerred people and established their superiority.

In the beginning they practised exposure and buried the skeletal remains in shallow pits, but as they reached the highlands of southern Baluchistan they switched over to cremation and buried the post-cremated remains in shallow pits. In both the examples cairns were erected over the pits. All cairns, however, were not sepulchral, some were definitely symbolic as they did not contain any skeletal remains. Sudden adoption of cremation and symbolic or memorial cairns, may indicate that war like conditions prevailed in which quick disposal of the dead body became essential, besides the difficulties of tracing all the bodies fell in battles. However, this suggestion can only be upheld if future discoveries from the habitation areas also give a supporting evidence. On the whole, the graves were poorly furnished although a few silver, iron and precious stone objects are found in them. These objects, as has been indicated earlier, are comparatively small in number.

The religious life of the people, apart from the graves, is not known. Like that of many other ancient peoples, the extra-mundane thoughts and beliefs of the people responsible for the cairns were also expressed primarily in terms of rituals connected with the disposal of the dead. Archaeologically, we do not know anything about the other forms of religious cults. This is, of course, besides those stone-circles which are often grouped with the cairn-burials but are reported to be non-sepulchral ;[71] in fact, some of them are being used by the Muslims for their daily prayers and are of recent origin.[72]

---

71. Walhouse, M.J., "Some Non-Sepulchral Rude Stone Monuments in India, Persia and Eastern Asia", *Ind. Ant.* vol. VIII (1879), pp. 164-67.
72. Dales, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 6

MEGALITHIC AND ALLIED MONUMENTS OF NORTHERN INDIA

From the Hindukush to Bengal and from the Himalayas to the Vindhyas, there is a vast land with several geographical and ethnological zones. Archaeological explorations for more than a hundred years have brought to light in this region different types of sepulchral monuments and memorials which are sometimes termed as 'megaliths'. There are some other structures which exhibit a mixture of megalithic and non-megalithic elements. The bones found in them are both of the cremated and non-cremated types. The grave goods have also been varied. In this chapter, we are, therefore, dealing with the megalithic and allied monuments of different cultural groups. Obviously, our treatment has been regional and under the following headings :

Part I : The Swat Valley Graves.

Part II : (i) The Cemeteries of Eastern Uttar Pradesh and Rajasthan (ii) The Graves of North-Western India (iii) Necropolises in Sind, and (iv) A Site in Gujarat.

PART I
THE SWAT VALLEY GRAVES

When peninsular India was passing through the Post-Harappan phase of the chalcolithic cultures, the Swat Valley in the north-western frontier of Pakistan was witnessing the emergence and expansion of a similar phase of the chalcolithic culture. This happened in the second half of the 2nd millennium B.C. and it was certainly a land-mark in the history of the Swat Valley. For the first time the people started disposing of their dead in a ceremonious manner. All along the valley, numerous cemeteries, with a variety of grave-structures, sprang up. The western part of this valley forms part of the Gandhara region. A. H. Dani, therefore, labelled the cultural equipment, so far almost exclusively gathered from the graves, as the 'Gandhara Grave Culture'. We

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

have not favoured this term because no culture expresses all its ethos in graves, either in their structures or in their grave-goods. Tucci and Antonini were the early explorers to identify these graves. They, however, called them simply as 'Pre-Buddhist'.[1] This term is equally unsatisfactory because it is absolutely vague in its meaning. We are, therfore, not using a term denoting a 'culture' known from the graves only, or denoting 'time'; for us the location of the graves found during the first explorations has been the only safe guide-line to evolve a term for the graves. We have called them as the 'Swat Valley Graves'. On the other hand, we have named the cultural material recovered from the graves as the Balambat culture, after the name of the only important habitation site, known so far in the Swat Valley, which belonged to some of the people who erected the Swat Valley graves.

The Swat Valley graves have been explored and excavated by several Italian missions and Pakistani expeditions. The former were mainly led by Stacul[2] and the latter by Dani.[3] By now, more than a dozen cemeteries have come to light. Some of the important cemeteries explored are located near Timargarha, Thana, Butkara, Loebanr and Katelai. The following chronological chart and periodization of the graves, based mainly upon C^{14} dates, are self-explanatory.

Iron Age	PERIOD III (900-600 B.C.,	It is characterized by post-exposure burials and post-cremation burials. Iron implements were found in the graves of the former category.
	× × × ×	Break (?)
Copper Age	PERIOD II (1200-1000 B.C.)	It is characterized by post-cremation burials in urns. Copper objects were found in a number of graves.
	PERIOD I (1600-1300 B.C.)	It is characterized by complete inhumations. Copper-objects were found in a few graves.

1. Tucci, G., "Preliminary Report on an Archaeological Survey in Swat", *EW*, vol. IX, pp. 279 ff. Antonini, *EW*, vol. 14 (1963), p. 13.
2. Stacul, G., "Preliminary Notes on the Excavation of the Necropolises found in Western Pakistan", *EW*, vol. XVI, pp. 37 ff.
   (ii) Stacul, G., "Preliminary Notes on the Discovery of a Necoropolis near Kherai in the Gorband Valley, (Swat, West Pak.)", *EW*, vol. XVI, pp. 261. ff.
   (iii) Stacul, G., "Discovery of four Pre-Buddhist Cemeteries near Pacha in Buner (Swat, West Pak.)", *EW*, vol. XVII, pp. 220 ff.
3. Dani, A. H., "Timargarha and Gandhara Grave Culture", *Anct. Pak.* vol. III.
4. *Ibid.*, p. 4.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The chart prepared above is based upon Dani's thesis.[4] Stacul[5] has suggested a slightly different scheme of things even though he has also divided the material in three different periods. The two schemes may be correlated as follows :

Stacul		*Dani*
Period III (600-400 B.C.)	=	?
Period II (1000-600 B. C.)	=	period III, period II
Period I (1600-1000 B.C.)	=	period I

It may be seen that both Complete Inhumation and Cremation were practised from the oldest times. To our mind Stacul has rightly discarded the thesis of Dani[6] that these were two separate practices and the graves must be distinguished accordingly in terms of periods. As already said in the Introduction, such archaeological interpretations are often found erroneous when seen in the light of living examples. In most of the societies more than one mode of the disposal of the dead is simultaneously followed. However, here we have followed Dani's periodization for uniformity and convenience sake, keeping in view that periodization is a time-bracket for the material culture and not for the actual burial types.

As said above the people in the Swat Valley followed several modes of the disposal of the dead. These included different types of post-cremation (partial and complete), post-exposure (collective and individual) and complete inhumation (extended and flexed) burials. Sometimes the two types are found in a mixed form. This, of course, happened in cases where the same grave was utilized repeatedly, sometimes to entomb the cremated bones and sometimes the post-exposure bones. The graves, in certain examples, were also collective in nature, i.e., fractional bones of more than one person were collected together and buried at one and the same time. The collective burials of the Complete Inhumation type have been termed by Dani as 'Multiple' burials. Of all the types, 'Mixed burials' are most interesting from our point of view because they furnish evidence of the repeated use of the graves. In India, we get the burials of this category only in the Swat Valley although in the European context this custom was prevalent among the megalith builders.

---

5. Stacul, "Discovery of four Pre-Buddhist Cemeteries," *EW*, vol. XVII, p. 232.
6. Dani, *op. cit*, p. 231.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In a number of cemeteries in the Swat Valley the excavators have reported several examples of graves cutting and recutting each other. It shows that the cemeteries were in use for a considerably long time.

It is significant to note that in many examples the orientation of the graves seems to have been determined not by any custom but by the direction of the slope of the mountain on which the cemetery was established. Thus, it is north-south at Loebanr, but north-west to south-east at Katelai, south-north at Butkara II, and north-south at Thana. Exceptions to this rule have been observed only in the graves inserted between two closely existing ones ; on such occassions the orientation was determined by the nature of the space available.

THE GRAVES : SOME STRUCTURAL DETAILS

(i) *Graves for Adults* : The graves for adults were made more or less in one and the same manner throughout the valley. A round pit, called 'upper pit', ranging in diameter from 4 metres to 2½ metres and, in depth, from 1 to 2 metres, dug was first in

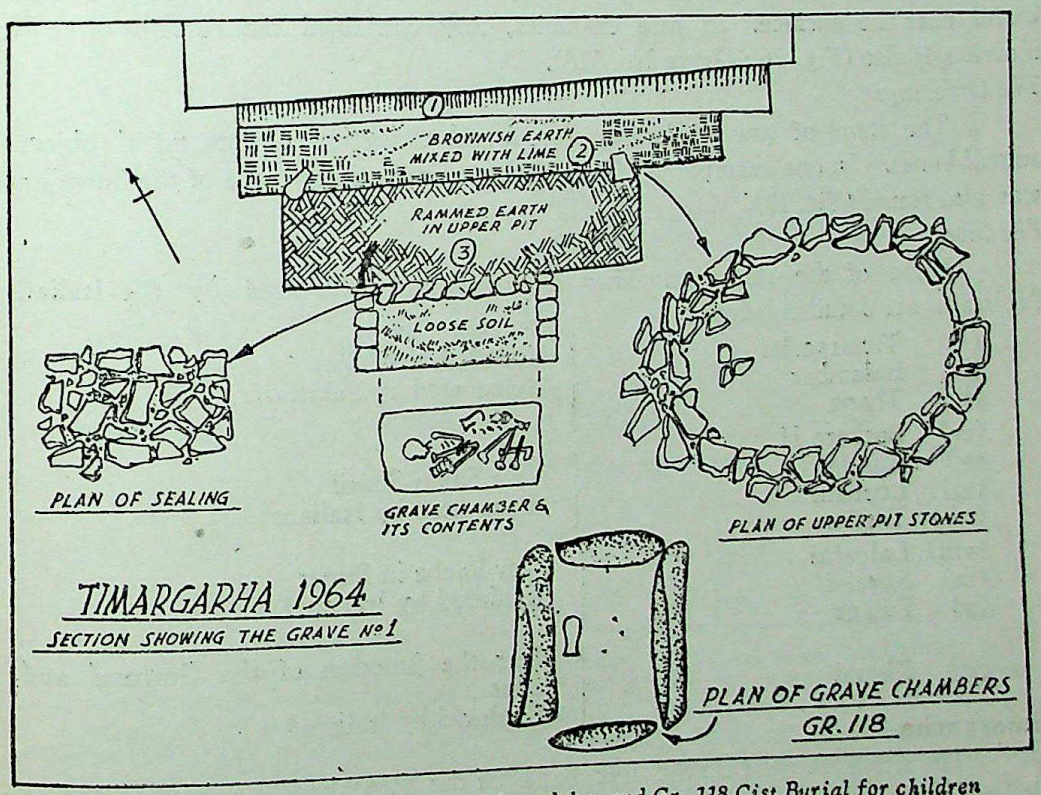


Fig. 16. *Grave No. 1 Double Pit Burial for adults, and Gr. 118 Cist Burial for children*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the ground. Then, in the middle of the base of this pit, was dug a second much smaller pit, called 'lower pit', which was rectangular in shape, about 1½ to 2 metre long and 1 to 1½ metre broad. The second pit was nearly a metre deep. The dead body or the skeletal remains, as the case might have been, were placed only in the lower pit which was invariably lined with dry masonry of 3 to 7 courses.

Next, the lower pit was filled either with loose earth or left void, but in either case it was sealed by multiple stone slabs which were often only the fragments of big slabs.

At the end, the upper pit was filled with the self-same earth, nicely rammed and made compact. On the ground, the pit was demarcated by a stone-circle. There were no cairn-stones filling the inner space (Fig. 16 : Grave No. 1).

(ii) *Graves for Children* : The graves made for children were much simpler than those for adults ; they had neither the upper pit nor the stone-circle. The bodies or the bones, as the case might have been, were deposited in rectangular pits lined with stones in two different ways : (a) by dry stone wallings and, (b) by single stone orthostats. The top, in both the cases, was covered with multiple stone-slabs, usually four to five, arranged across the pit. These graves were shallow and usually found near the surface. In rare examples, they contained the remains of grown up individuals also (Fig. 16 : Grave No. 118).

The Offerings

The items of grave-offerings were found consisting of pots, metal objects and animal bones. In one example at Timargarha an iron check-piece of the horse's snaffle was also found (Fig. 17).

The Sites

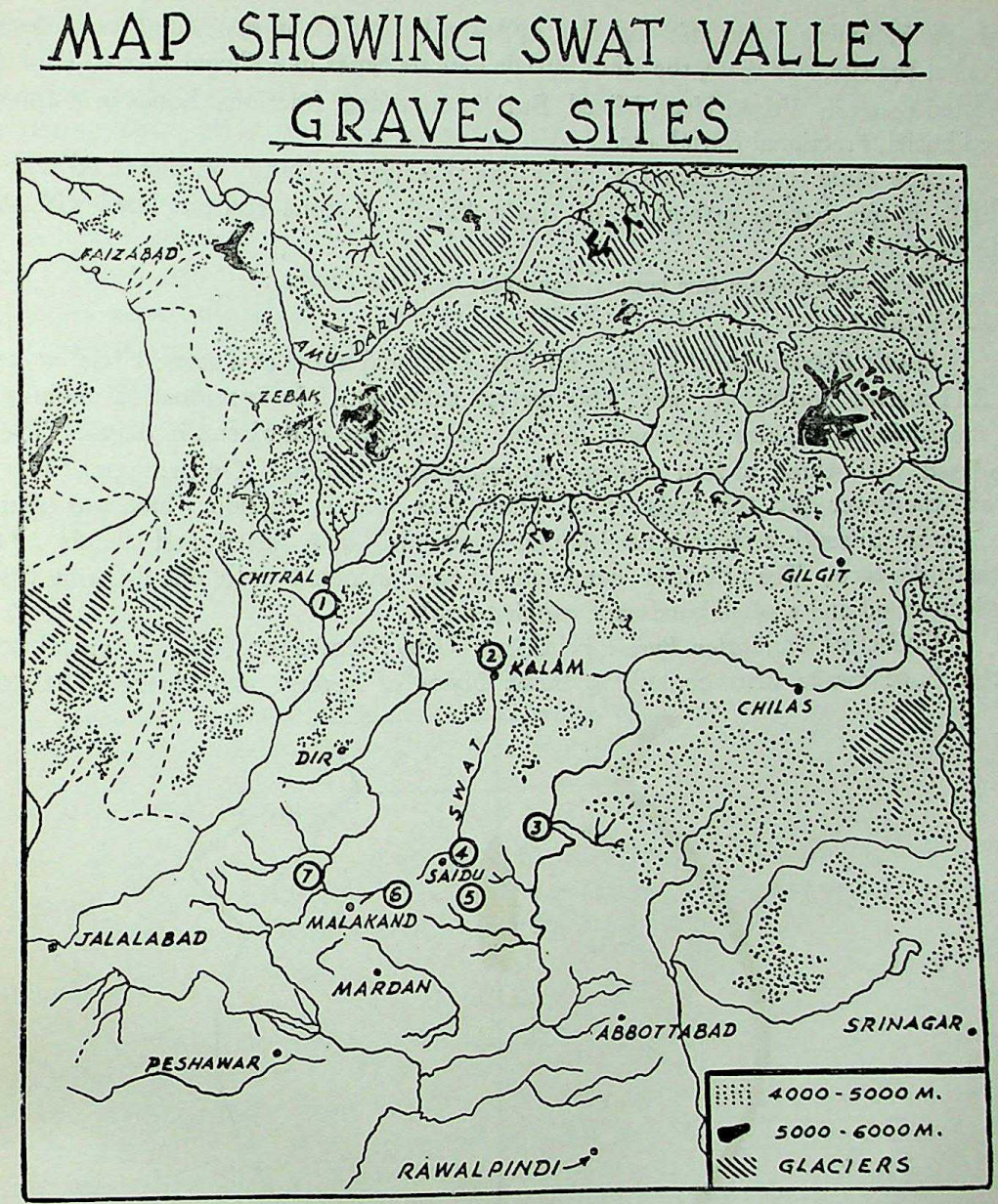
Some of the important sites explored and excavated by the Italians and Pakistanis are detailed below :

(i)	Timargarha	Lower Swat Valley (Excavated by Pakistanis)
(ii)	Balambat	
(iii)	Thana	
(iv)	Butkara II	Near Saidu Sharif (Excavated by Italians)
(v)	Katelai I	
(vi)	Loebanr	
(vii)	Tarike	
(viii)	Lalbatai	Near Pacha in Buner (Explored by Italians)
(ix)	Sogalai	
(x)	Pulanr	
(xi)	Kherai	Near the junction of the Gorband and the Indus (Explored by Italians)

Timargarha

The site is situated on the left bank of the Panchkora, a tributary of the Swat. It is hardly 3 kms. up from the confluence of the Jandul and Panchkora. The famous

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



SKETCH-MAP OF THE NORTH-WEST REGIONS OF THE INDO-PAKISTAN SUB-CONTINENT. CEMETERIES ARE SHOWN BY MEANS OF NUMBERS INSIDE CIRCLES: 1, NOGHORMURI, BALA HISAR, TAMUNAK (CHITRAL VALLEY); 2, USHORAM, RASHNEL (KALAM VALLEY); 3, KHERAI (GORBAND VALLEY, INDUS KOHISTAN); 4, LOEBANR, BUTKARA II, KATELAI (MINGORA, SWAT VALLEY); 5, TARIKE, LALBATAI, PULANR, SOGALAI (BUNER); 6, THANA (SWAT VALLEY, MALAKAND AGENCY); 7, TIMARGARHA, BALAMBAT (PANJKORA VALLEY, DIR).

Fig. 17. *Swat Valley Sites.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

town of Balambat is situated on the opposite bank. Dani excavated more than 150 graves at the site. Of these, the adult burials include types like Flexed Burial, Collective cremated bones in Visage Urns, Mixed Burial containing fractional bones in a grave of flexed burial, Fractional Burial, etc.

The child burials included types like Fractional Burial in pits lined with dry walling, in pits having orthostats of single blocks of stone and pits lined with single slabs of stone, etc.

Below are given a few typical examples of these graves :

ADULT BURIALS

Single Flexed Burial : Grave no. 1 is a typical grave of a stone-circle, measuring 2·11 metres north-south and 1·50 metres east-west. It contained a rectangular pit, measuring 1·10 metres in length, 63 cm. in breadth and 61 cm. in depth. The pit was lined with three to four courses of dry masonry walling. On the floor of this pit, called 'the lower pit', the body of an adult was laid on its side, which was oriented north-west to south-east, the head facing westward, legs flexed and hands drawn towards the face. The offerings consisted of two drinking cups, one drinking vase, a bowl-on-stand and a small handmade cooking pot.[7]

Collective Cremation Burial in Visage Urns : Grave no. 122 is a typical grave of two huge visage urns containing burnt bones of several individuals. The grave

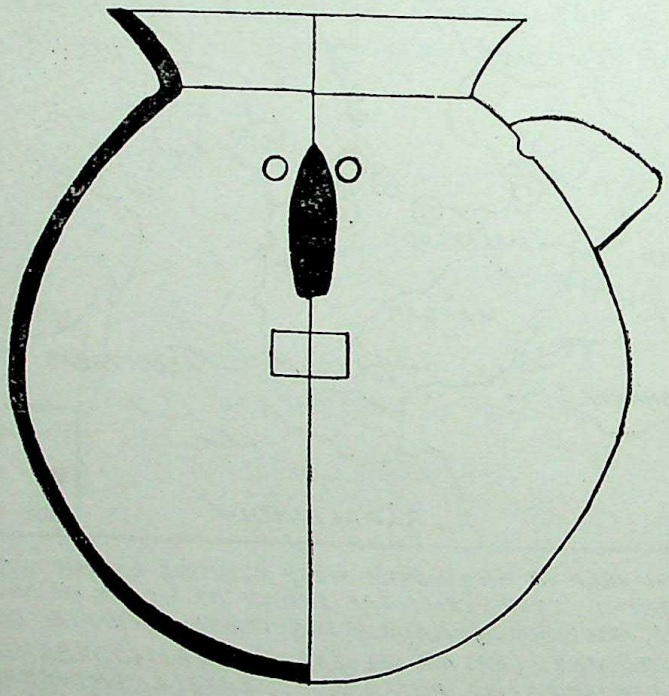


Fig. 18. *Visage Urn from a Swat Valley grave.*

7. *Ibid.*, pp. 65-66.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

goods in them were relatively richer. One of the urns contained 24 earthen pots, one copper pin, one copper antimony rod, one gold ring, one bead of semi-precious stone and one copper hooked-rod with a blade at the other end. The other urn produced, besides bones, a carnelian bead, a gold ring and a pin.[8]

Re-used Grave : Grave no. 197 is a typical example of a re-used burial. Inside the grave, constructed in the usual fashion, the skeletal remains of two individuals were found. In the upper level of the grave there were along with a number of funerary vessels the scattered bones of an individual. Below this, at a little depth, there were the remains of another individual laid flexed. Dani feels that 'the evidence is clear and definite. It is obvious that those who practised fractional buried, evidently of the Iron Age, opened an earlier grave where a complete skeleton lay buried underneath.'[9]

Fractional Burial : Grave no. 109 is a good example of a fractional burial containing, besides the fragmentary human bones, the skeletal remains of a young goat which was, probably, a sacrificial item. The grave-goods consisted of eight vessels and a heavily encrusted iron spear-head.[10]

Mixed Burial : Grave no. 183 is an example of a 'Mixed Burial' because it contained the flexed body of one individual and the post-exposure bones of another. The grave is interesting because of an offering bowl containing the bones of a snake as also a human terracotta figurine kept near the pelvis of the flexed body.[11]

CHILD BURIALS

These burials were all simple cists, sometimes found covered with multiple capstones. The bones found in them were generally decayed and fragmentary. There is hardly anything special about any one of them to mention.

Balambat

The mound of Balambat seems to represent the habitational site of the people who buried their dead in the Timargarha cemetery. The site lies opposite the cemetery, on the right bank of the Panjkora. It has, however, been claimed that at least one section of the population did not follow the practice of burying the dead bodies in regular cemeteries. Although it is difficult to ascertain the exact reason for this ; yet the evidence shows, at least in a few cases, that the people did entomb the post-cremation bones within

8. *Ibid.*, p. 75.
9. *Ibid.*, pp. 83 and 84.
10. *Ibid.*, p. 84.
11. *Ibid.*, pp. 89-90.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the habitation itself. Near the walls of the houses of period II, some burial pots, arranged in groups, were found in shallow pits. They seem to have been intentionally buried there. However, out of several such groups of pots, only four had the human bones which were all calcined, indicating cremation. One of these groups (No. 1) also contained a terracotta bead.[12] The general paucity of skeletal remains in these burials is, however, enigmatic.

Thana

The site is near the village Thana, located a few kilometres south of the Swat river and 5 kms. from the Chakdara post. Only twelve graves were dug here. The dead bodies were disposed of in three different ways, as at Timargarha.

These are :

(i) Flexed burial for adults,

(ii) Fractional burial for adults as well as for infants,

(iii) Cremation burial for adults as well as for infants.

The relative chronology worked out for these burials was, however, not the same as it was for the Timargarha burials. Thus, the Flexed burials here belong to period II of Timargarha (1200-1000 B.C.) and the Fractional burials belong to period III of Timargarha (900-600 B.C.). According to Dani, the cemetery at Thana was, therefore, later in date than the cemetery at Timargarha.[13]

The constructional features of the graves at Thana also show some significant differences : there was neither the stone-circle nor the upper pit ; after removing the upper layers of humus and debris, one touches the capstones sealing the graves. It was like the child-burials of Timargarha, although the grave was not lined with masonry walls of stones. However, the floor was paved with one or more large schist slabs on which the body was placed.

Flexed Burial : Grave no. 3 was encountered at a depth of 7·3 cm. from the surface. The capstones consisted of four large schist slabs placed across the grave-pit and fixed firmly with smaller stones and mud lining. The pit measured 2·29 metres x 1·03 metres. It was 1·08 metre deep. Inside the pit was buried a dead body in the flexed posture, laid in the north-south orientation. The grave-goods consisted of a globular urn, fourteen drinking cups and one narrow-necked bottle.[14]

12. *Ibid.*, p. 241.
13. *Ibid.*, pp. 227-28.
14. *Ibid.*, p. 215.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Fractional Burial : Grave no. 4 was of the above type but instead of a complete skeleton there lay on the floor only half of a skull and a long bone. There was only one offering pot, a goblet.[15]

Cremation Burial in Urn: Grave no. 11 was similar to those mentioned above. Inside the grave-pit, however, the charred skeletal remains and ashes were found inserted in a long narrow necked vase with flaring rim and globular body.[16]

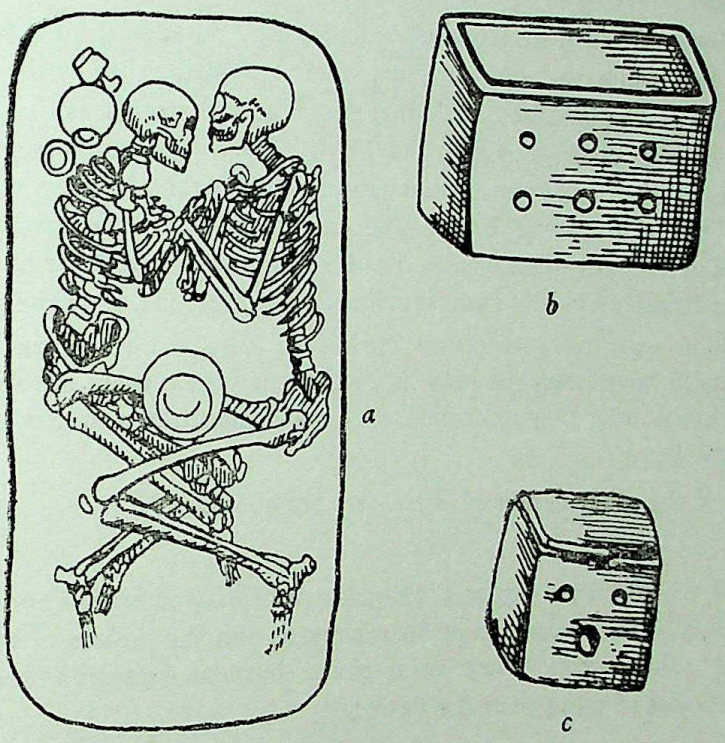


Fig. 19. (*a*) *Double Burial from Loebanr* ; (*b*) *and* (*c*) *Box-Urns from Katelai.*

Sites near Saidu Sharif

Near the town Saidu Sharif, Swat State, there are three important sites, known as Butkara (II), Katelai (I) and Loebanr (I), after the names of the villages near which they are situated. It is interesting to note that the graves at all the three places share several common characteristics. Thus, Complete Inhumation, Cremation and Fractional

15. *Ibid.*, p. 217.
16. *Ibid.*, p. 218.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

burials are found on all the three sites. Similarly, the Collective and Multiple burials are also found there. In morphology, while some of the graves are similar to those met with at Thana, some others are similar to those discovered at Timargarha. Thus, at Katelai I there are Single Pit Graves covered with two to four slabs while at Butkara II there are Double Pit Graves. In the latter examples, however, it has been found that the stone-circles are missing and the lining of the lower pit with dry stone masonry is rarely adopted. It is, perhaps equally significant to note that sometimes the lower pit is round and not rectangular.

The grave-offerings are found placed variably. Most of the big pots were usually kept at the feet while the smaller pots were arranged either by the knees or by the head of the body. The jewellery, including ear-rings and necklaces, is generally found at the level of the chest, or under the head. The metal implements and utensils were sporadic in their placement, although in several examples they were placed near the chest of the side of the body. The terracotta anthropomorphic figurines were deposited under the arm-pits or the head or, at any rate, near the body. In rare examples glass objects have also been found included in the items of the offerings.

At these sites post-cremation burials in Visage Urns have been recovered. They are usually found covered with lids. On the profile there are slits and holes, so shaped and arranged that they indicate the eyes and mouth of a human being[17] (Fig. 18 and Plate XXVII).

Some of the other details of these sites are as follows :

Butkara II

Out of the 48 graves dug at Butkara some had flexed burials and some had post-cremation burials. The lower pits of the graves, as also the skeletons, wherever found, were oriented south-north. They were single burials, excepting two graves which contained the bones of more than one person.[18]

Katelai I

At Katelai 35 graves have been excavated, of which two were Post-cremation burials, two were Fractional Burials and three were Twin Flexed Burials. Mixed Burials—'flexed' superimposed by 'cremation' (complete or partial) burial—were numerous as also the Single Flexed Burials. In a single example a terracotta 'box urn' burial was found containing cremated bones and some ash (Fig. 19b and Plate XXVIII). The graves were oriented south-west to north-east, the head being kept towards the south-west. In a number of examples the graves were found cutting and recutting each other. Interestingly

17. Stacul, "Preliminary Notes on the Excavation of the Necropolis.....", *EW*, vol. XVI, p. 65.
18. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

enough, the upper pits of some of the graves were divided into two parts by a stone wall. The children were buried in the same cemetery but only in the south-eastern corner (Plate XXIX).

Within the cemetery, but with no particular reference to any grave, were found two complete skeletons of the domesticated horses. The discovery assumes some significance when seen in the context of the handle of an earthen lid of a pot because it was also shaped like a horse. The lid, however, comes from a tomb at Loebanr.[19] Further, an iron horse-bit has been reported from one of the graves at Timargarha.[20] It is, therefore, amply clear that the people were horse-breeders. It is probably one of the earliest examples of the domesticated horse in India.

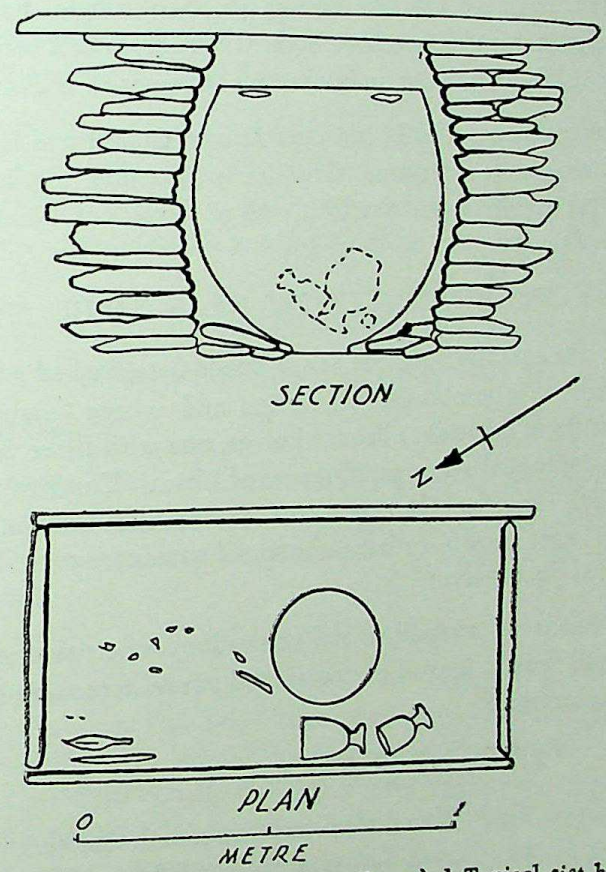


Fig. 20. (*upper*) *A Typical Urn Burial at Lalbata* (*lower*) *A Typical cist burial at Pulanr.*

19. Antonini, C. S. "Preliminary Notes on the Excavation of the Necropolises found in Western Pakistan", *EW*, vol. XIV, p. 22.
20. Dani, *op. cit.*, pp. 203-207. The note on it is by Karl Jetmar.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The site is particularly known for three graves. In two of them the capstone, exactly above the head, had a big hole. In the third example the holed capstone was placed directly on the burial-urn.[21] The use of deliberate portal in the burial-structure assumes a good deal of significance when seen in the light of port-holed cists usually associated with megaliths in south India as well as in the Mediterranean world.

Loebanr

The site, situated on the river Jambil, is near the town Mingora. Here, sixty five graves, oriented south-north, have been excavated. Morphologically, the graves belong to the Double Pit variety. Of these graves twenty seven yielded half-burned bones, and twenty eight, flexed burials. Of the latter, 18 were single burials, 7 were double burials (Fig 19*a*), 1 was a multiple (three bodies) burial and 2 were fractional burials. The remaining 10 burials had either no bones or had bones in a disturbed condition.

The largest number of offering pots in any single grave has been 23 ; some of them had beautiful incised decorations. The site is specially marked for two graves, each had its lower pit divided crosswise by a wall of stones containing a tiny rectangular door-way at its base.[22]

GRAVE-OFFERINGS AT SITES NEAR SAIDU SHARIF

Apart from the earthen pots, the grave-goods consisted of gold rings ; a bronze harpoon whose hook is rhomboidal in section and whose lower end is conical and hollow for the insertion of a handle ; bronze knives, one with three holes on the blade. Some of the graves contained a few small leaves of silver. The graves have also yielded pieces of iron-objects and, at least, two spearheads with ferrule. Besides the metal objects, the graves are known to have contained some objects of bone, e.g., bracelets and discs with incised decorations.

Numerous beads of carnelian and chalcedony; one macehead of stone; several terracotta whorls and, female figurines; one animal figure, etc., were the other important items of the grave-offerings.[23]

SITES NEAR PACHA, IN BUNER

A little south of Saidu Sharif there are the mountaineous spurs of Loe Sar and Ilam from which emerge the Malang Khwar and Koga Khwar; 'Khwar' is the local term used for a mountaineous river. In their basins are located the cemetery sites of Tarike,

---

21. Antonini, *op. cit.*, p. 17-18.
22. Stacul, "Preliminary Notes.....," *EW*, vol. XVI Nos. 1—2, (1966), p. 65.
23. Antonini, *op. cit.*, pp. 22-24.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Lal Batai, Sogalai and Pulanr which are within the boundaries of the town Pacha. At these sites only some exploratory trenches were laid, otherwise the graves already exposed by rains were cleaned. The results obtained, therefore, have been far from complete and give us only a few details. These are, however, in conformity with those already obtained from Timargarha, etc. The pottery and other antiquities also indicate their homogeneity with those discovered at other sites. Two types of graves have been recorded at these sites:

(i) Rectangular pit having sides lined with single slabs and floor paved with one or more stones. This type of cist burial has also been found at other sites. Only a few uncalcined bones were found in them.

(ii) Oval pit lined with dry stone walling of several courses. The pit was entombing a large plain burial jar containing burned and unburned bones.

In the urn burials of this type, first a deep pit is dug and then it is lined with dry masonry. The shape of this lined pit conform to the shape of the globular urn, the mouth remain protruding overground. A rectangular patch of ground, round the mouth is paved with stone-slab pieces in order to cover the urn up to the rim and also demarcate it.

At these sites the cist and the urn, both were sealed by one or more slabs.

Below are given a few details recorded at these sites.[24]

Tarike, Lalbatai and Sogalai

At these sites several Cist and Urn burials (Fig. 20, upper, and Plate XXX) have been discovered. Surprisingly enough, the shorter sides of the rectangular cists had taller slabs than those on the longer sides. In one of the Lalbatai graves a bee-hive shaped spindle whorl was found.

Pulanr

Pulanr is an important discovery in Burner area because the graves at this site have yielded a few interesting iron objects such as leaf-shaped spearhead, javelin-head and large pins. The graves were oriented west-east as at Tarike and Lalbatai but here their orientation was north-east to south-west. Unfortunately, only one grave, a cist, was properly dug at this site (Fig. 20, lower, and Plate XXXI).

THE SWAT VALLEY GRAVES AND THE EARLY ARYANS

Dani has repeatedly asserted that the grave builders in the Swat Valley belonged to the early groups of the Aryans. He feels that 'there is a priori basis for equating

24. Stacul, "Discovery of four Pre-Buddhist Cemeteries....." *EW*, vol. XVII, p. 220 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the literary materials of the *Rigveda* with those now brought forth from the archaeological excavations' and gives five points in favour of his theory :

(i) The geographic scene of archaeology and history opens in the same region.

(ii) The chronological period of both refers to the same time.

(iii) The knowledge of copper or bronze technology is seen at this time.

(iv) The disposal of the dead, first by burial and later by the addition of cremation, is also similar.

(v) The literary evidence brings the Aryans from the west. The archaeological evidence also connects the grave culture with the plain grey ware tradition of the west.[25]

LITERARY EVIDENCE

Before we accept or reject Dani's assertion, it is worthwhile to know something of the burial customs of the Early as well as Late Aryans as embodied in the *Rigveda* and the *Brāhmaṇas* and then try to correlate them with the archaeological evidence, if we can.

In the *Rigveda*, cremation (*agnidagdha*) is repeatedly mentioned as the popular mode of the disposal of the dead. However, sometimes references to non-cremation burials (*anagnidagdha*) also occur. The implication of the term *anagnidagdha* has, unfortunately, not been elaborated in the text. We are not sure whether it meant complete inhumation or exposure, or else it stood for cist-burials or pit-burials.

The *Atharvaveda*, however, has been more explicit on this point. Besides cremation, it mentions burial in a pit below ground (*nikhātāḥ*) and cast-away (*paroptāḥ*). These two modes are included under the term '*anagnidagdha*'.[26] Unfortunately, the details involved in these types of burial are also not given anywhere and one has to make out the meaning from the context and in the light of the commentaries of a very late date.

According to Kane the term '*anagnidagdha*' in the *RV.* "might refer to the cases in which 'ancestors were killed far from home in a fight or (if) they were kidnapped and killed by enemies (and their bodies might have been left uncared for in

25. Dani, *op. cit.*, p. 52.

26. *AV.* XVIII, 2.2.34,; See also, Macdonell and Keith, *Vedic Index*, vol. I, pp. 8-9.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

a distant land and not cremated nor buried)."[27] He further mentions that in ancient India 'burial' and not cremation was adopted in certain other 'exceptional cases such as infants, ascetics, etc.' It is certainly so in the *Dharmaśāstras* of a much later date and, therefore, may or may not have been the case with the Rigvedic people. Thus, Kane may be correct, but only so far as his first hypothesis is concerned. Sāyaṇa, however, commented upon the term in a different way. According to him, the term positively stood for the burial below ground (*khananādi saṁskāreṇa*).[28] It is possible that during the 14th century A.D. when Sāyaṇa wrote his commentary the term was understood in his sense alone.

The term '*nikhātāḥ*' occurring in the *Atharvaveda* seems to have been used for burial below ground. Sāyaṇa also took it in this sense and called it '*nikhanana saṁskāreṇa.*'[29]

'*Paroptāḥ*' was the term used for 'cast-away once and for all'. Sāyaṇa explains it as '*dūradeśe kāṣṭhavatparityāgaḥ*'[30], i.e., cast away in a distant land, probably, far away from the habitation. But neither the *Atharvaveda* nor its commentator mentions the circumstances in which this mode of the disposal of the dead was adopted, and also the manner the bodies were cast away. Kane has quoted an interesting reference occuring in the *Ādipurāṇa*, as quoted by Harlata, according to which while 'the Magas bury the bodies underground, the Daradas and Luptrakas go away after placing their dead relatives on trees'.[31] Although the reference is of a very late date, 'cast-away' might have implied a mode similar to that adopted by the Daradas and Luptrakas.

The term *uddhitāḥ* has not been translated very satisfactorily. Sāyaṇa considers it as a term denoting 'setting up of the dead, after the *antyeṣṭi-saṁskāra*, in the other world' (*saṁskārottarakālaṁ ūrdhvadeśe pitṛloke sthitāḥ*).[32] The *Āpastamba Śrautasūtra* (i.8.7.) has been quoted by Kane as containing a verse analogous to the verse 2.2.34 of

---

27. Kane, P. V., *History of Dharmaśāstra*, vol. IV, p. 232.
28. ये पितरः अग्निदग्धाः अग्निना संस्कृताः। ये च अनग्निदग्धाः अग्निदाहरहितेन खननादिसंस्कारेण संस्कृतादिवः द्युलोकस्य मध्ये स्वधया।
29. ये पितरः भूमौ निखाताः निखननसंस्कारेण संस्कृताः। खनु अवदारणे। कर्मणि निष्ठा। जनसनखनो सञ्झलोः इति आत्वम्।
30. ये च पितरः परोप्ताः परावपनं दूरदेशेकाष्ठवत्परित्यागः।
31. मगा भूमौ निखन्यन्ते दरदांश्च मृतान् सदा। आसद्य (ज्य?) वृक्षे गच्छन्ति लुप्त्रकाश्च स्वबान्धवम्।
32. ये च उद्धिताः संस्कारोत्तरकालम् ऊर्ध्वदेशे पितृलोके स्थिताः।

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the *AV.* Whitney feels that the verse, according to the *Kauśikasūtra* of *AV.* 87.22, is used with verse 3.47,48 and 4.41, in the *Piṇḍapitṛyajña* ceremony to accompany the setting up of one of the two lighted sticks and piling fuel around it.[33] This is, of course, a very late context and may or may not represent the original meaning of the term. Whitney[34] and Griffith[35] have translated the term as 'exposed'. Exposure, however, is a mode quite different from the one detailed above. Whatever may be the fact, the context and sequence in which the term occurs in the *AV.* clearly show that *uddhitāḥ* was a separate mode of the disposal of the dead, somewhat analogous to *paroptāḥ* of the non-cremation type. If that is so, 'exposure' seems to be the correct interpretation of the term.

Besides these terms occurring in the *RV.* and *AV.*, there are certain other verses in the *Vedas* and the *Dharmaśāstras* which have been from time to time interpreted in terms of non-cremation burial. Some of these relevant verses may now be considered.

There is a verse in the *RV.* (10.18.13) which is supposed to indicate an underground burial containing earth covered with earthen clods. In this arrangement the dust particles do not hurt the dead.[36] Sāyaṇa, however, feels that the grave also contained a jar with the post-cremation bones and ashes and that the verse referred to the dead through the burial jar '*asthikumbha*'.[37] If that be so, the verse may not stand for non-cremation burial. The question is, however, again the same: whether Sāyaṇa was or was not reflecting the practices of his own time ?

Exactly the same situation exists with regard to a few other verses in the *RV.* as well as in the *AV.* The *RV.* 2.1. 10 describes the earth as mother, very kind and gracious, and wool-soft. It wishes the dead a fully protected life in her lap.[38] *RV.* 2.18.12 goes to say that the earth may form a stupa to cover the dead ; may be like a house to give shelter, etc.[39] *AV.* 2.50,51,52, etc., have similar verses. In *AV.* 2.25[40] it is wished that

---

33. Whitney, W. D., *Atharvaveda, Translation and Notes*, vol. 8, pp. 840-41.
34. *Ibid.*
35. Griffith, R.T.H., *Hymns of the Atharvaveda*, vol. II, p. 232.
36. उत्ते स्तभ्नामि पृथिवीं त्वत्परीमं लोगं निदधन्मो अहं रिषं ।
एतां स्थूणां पितरो धारयंतु तेऽत्रा यमः सादना ते मिनोतु ॥
37. हे अस्थिकुम्भ त्वत्परि । परिशब्दयोगे पञ्चमी । . . . . .
38. उपसर्प मातरं भूमिमेतामुरुव्यचसं पृथिवीं सुशेवां ।
ऊर्णम्रदा युवतिर्दक्षिणावत् एषा त्वा पातु निऋतेरुपस्थात् ॥
39. उच्छ्वचमाना पृथिवी सु तिष्ठतु सहस्रं मित उप हि श्रयंताम् ।
ते गृहासो घृतश्चुतो भवंतु विश्वाहास्मै शरणाः संत्वत्र ॥
40. Whitney, *op. cit.*, p. 838.
मा त्वा वृक्षः सं बाधिष्ट मा देवी पृथिवी मही ।
लोकं पितृषु वित्वैधस्व यमराजसु ॥

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

'let not the tree oppress thee, nor the great divine earth.....' Whitney has, however, noted that according to *Kauśikasūtra* 82.32 this verse (*AV.* 2. 75) accompanies the deposit of the collected cremated bone-relics at the foot of a tree. It might be interesting to note that the terms like '*vṛkṣa*' and '*vanaspati*' are sometimes considered as standing for coffin although in the present context it may not be applicable.[41] Sāyaṇa once again sees all these references in the context of post-cremation urn burial. Did the Vedic people adopt the practice of reburial, is another question often raised.

A verse in the *AV.* (3.70) is significant in this context. The tree under which the bones were deposited is requested 'to give back again this man who is deposited on thee, that he may dwell in Yama's home, addressing the assemblies there'.[42] According to *Kauśikasūtra* (83.19) 'the verse is repeated when the bone-relics are removed from the root of a tree, at which they have been previously so deposited.' In some cases the unearthed bones are cast away in holy rivers, but in others they are reburied at another place, a little away from the village, where a burial mound is erected over the bones.

Another question often asked is as to how many types of sepulchral monuments were erected during the Vedic period ?

Śatapatha Brāhmaṇa (XIII. 8.1),[43] closely followed by *Kauśikasūtra* (83. 5-7), gives a detailed description of the Vedic and Non-Vedic burial types. They are respectively designated by the terms '*daivya*' and '*asura*'. According to the *Śatapatha* the burial should not be built too soon after the death, but when people do not even remember the year of the death.' Obviously, it relates to secondary burials (of memorials) and not to the primary inhumations. Thus, according to it the sepulchral monuments are hardly erected on the graves of complete inhumation, if that practice was at all in vogue. The verse further says that the burial monument should be four cornered, because the people who are worshippers of gods (or are godly) make their burial mounds four cornered, while those who are followers of Asuras, the Easterns and such like people, make them round. It is clear that while the Aryan practice was of rectangular or square monuments, the non-Aryan practice was of round structures. The verse XIII. 8 of the *Śatapatha* makes another very significant point. It mentions that 'the godly people make their sepulchral monuments so as not to be separate from the earth, while those who

41. Whitney, *op. cit.*, p. 868.
पुनर्देहि वनस्पते य एष निहितस्त्वयि ।
यथा यमस्य सादन आसाते विदथा वदन् ॥ *AV. XVIII* 3.70

42. *Ibid.*

43. अथास्मै श्मशानं कुर्वन्ति । .... तद्वै न क्षिप्रं कुर्यात् । नेन्नवमघं करवाणीति चिर एव कुर्यादद्यमेव तत्तिरः करोति यत्र समा नानु च न स्मरेयुः । .... चतुःस्रक्ति । तस्माद्या दैव्यः प्रजाश्चतुःस्रक्तीनि ताः श्मशानानि कुर्वतेऽथ या आसुर्यः प्राच्यास्त्वद्यत्वे परिमण्डलानि । ....

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

are of the *Asura* stamp make them so as to be separate from the earth, either on a stone basin or a similar thing.[44] Thus, the pit-burials are to be classified as Aryan while cist-burials as non-Aryan. Now, how to reconcile with the situation in which both the urn burials and pit-burials appear as Aryan customs? Probably, the Vedic practice often involved reburial, i.e., the primary burial was of the ashes in urns and secondary burial involved emptying the ashes from the urns into pits or over the ground. It is further stated that a cairn of stones was raised over the bones thus taken out of the urns and that its height differed according to the caste and sex of the deceased, but higher than the height of the dead.

Śatapatha XIII. 8.1[45] mentions that 'one who has performed *Agnicayana*, he makes the tomb after the manner of the fire altar, i.e., it is broader behind (to the west) and broader on the north side'. Kane has quoted from *Satyāṣāḍha Śrautasūtra* (28.4.28), closely followed by *Baudhāyana Pitṛsūtra* (II. 3.2), to show that during the period of the *Dharmaśāstra* the cremated bones were disposed of in four different ways.[46]

(i) The bones of those who have not consecrated *Śrauta* fires are buried in urns deposited below ground.

(ii) The bones of those who have performed the *Haviryajñas* are deposited in the earth, i.e., in a pit or on the ground directly, and then covered with earth, the urn being not used in this case.

(iii) The bones of those who have offered Soma sacrifice are re-cremated.

(iv) Over the bones of those who have performed *Agnicayana* a brick or clod structure is made.

The above details make two things very clear; firstly, with the passage of time, the funerary practices got complicated and became matters of ritualistic details, and secondly, they included urn burials, pit burials, earth burials and mound burials, all within the Aryan fold. As said earlier, the mound burials, were rectangular or square, i.e., four cornered. According to *Āśvalāyana Gṛhyasūtra*, IV. 5 the urn containing the bones of women had special marks (protuberances) but not the urns

---

44. देवाश्चासुराश्चोभये प्राजापत्या अस्मिंलोकेऽस्पर्धन्त ते देवा असुरान्त्सपत्नान्भ्रातृव्यानस्माल्लोकादनुदन्त तस्माद्या दैव्यः प्रजा अनन्तर्हितानि ताः श्मशानानि कुर्वतेऽथ या आसुर्यः प्राच्यास्त्वद्य त्वदन्तर्हितानि ते चम्वां त्वद्यस्मिंस्त्वत् ।

45. ···तद्वै न महत्कुर्यात् । नेन्महदधं करवाणीति । ···पुरुषमात्रं त्वेव कुर्यात्···पश्चाद्वरीयः उत्तरतो वर्षीयः । तद्विधायापसलविसृष्टाभिःस्पन्याभिः पर्यतिनोति··· ।

46. Kane, *op. cit.*, p. 246. footnote 559. See also p. 255.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

with bones of men.[47] The female urns were called *Kumbhis* while the male urns were called *Kumbhas*. *Nārayaṇa*, the commentator, called the former as *stanavati* and the latter *stanarahita*. The texts have, however, not made it clear if the dead body amongst the Asuras was cremated or not. *Śatapatha Brāhmaṇa* has written enough about the differences in the burial monuments of the Aryan and non-Aryan peoples but not about the actual disposal of the dead body. This is surprising, unless we take it for granted that the bodies of the Asuras were cremated, because when the texts could mention so many differences between the Aryan and non-Aryan practices, why should they keep complete silence over this important issue.

Whether complete inhumation was practised during the Early Vedic period or not may be controversial but it is not so when we consider the period of the *Dharmaśāstras*. By that time it became as established practice that children below a particular age, two, three or five years according to different texts, and ascetics of particular categories were completely buried, because of reasons given by different texts differently.[48] The infants, it is believed do not attain their full being before certain ceremonies, e.g., *annaprāśana* or *caula* (tonsure) or *upanayana*. A *yati* or *sanyāsin* is not cremated because he has already abjured the *Śrauta* or *Smarta* fire with which alone the body is cremated. The *yatis*, however, have their own categories like *Kuṭicaka*, *Bahūdaka*, *Haṁsa* and *Paramahaṁsa*, and according to the *Dharmasindhu* the *Kuṭicakas* are to be cremated. According *Smṛtyarthasāra*, the *Kuṭicakas* should be cremated, the *Bahūdakas* should be buried, the *Haṁsas* should be thrown into water, the *Paramahaṁsas* should be buried. Since now a days all the *yatis* are *Paramahaṁsas*, they are buried.

Do the Swat valley graves, then, reflect the time of the *RV*. or of the later Sanskrit literature ? The graves, after all, are dated between 1500 and 400 B. C. and, therefore, they fall in the entire range of period covered by the texts quoted here.

The cemetery of Timargarha, which is partly the oldest in the series, is supposed to reflect the burial customs of the *Rigveda*. Unfortunately, it has primarily yielded Pit-circles erected over rectangular pits lined with stones. Clearly, in spite of the fact that there were no cists or urns for the bones the pit was lined with stones and the bones were protected from getting in touch with the earth. The *RV*. does not support this evidence. In the light of the references in the *Śatapatha Brāhmaṇa* the position

47. *Ibid*., p. 241. Some of the burial urns at the Chalcolithic sites of Tekkalkota, Nevasa and Chandoli have protuberances. R. L. Mitra took the *Kumbhī* as a pot with spout, which is obviously not correct (See his Introduction in the *Aitareya Āraṇyaka*). For other related problems see D. K. Chakravarty, "A Note on Protohistoric Burial Urns", *Man In India*, vol. 51, no. 1 (1971), pp. 41 to 49.

48. Kane, *op-cit*., pp. 227-31.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

becomes more strange. The Swat Valley sepulchral monuments are, therefore, both Aryan and non-Aryan at one and the same time. It is impossible. As far as the actual disposal of the dead body is concerned, according to Stacul, the excavator, burial and cremation both were known and practised. However, according to Dani,[49] cremation appeared later, in Period II. But cremation appears to be the most dominant mode of the disposal of the dead in the *Rigveda*. One wonders as to how Period I inhumation burials exclusively reflect the Rigvedic practices. While no where in the Early or Later Vedic literature there is a single reference of collective burial of burnt bones, at Timargarha the burnt bones of several persons were actually found buried together in single urns. Similarly, although according to *Āśvalāyana Gṛhya Sūtra* the earthen urn containing the bones of females are marked by two protuberances[50], the urns found at Timargarha are 'Visage-Urns', looking like the face of a man, and were devoid of protuberances. Moreover, such urns contained the bones of not only the females but also the males and children.[51] Obviously, the whole picture was different from the one contained in the entire Vedic literature in which infants are always recommended burial. At sites like Thana the urns were simple and globular as well as of the elaborate 'visage' type. It is, therefore, possible that the former were the burials of the lowly placed people. The visage urns are quite elaborate and, therefore, imply a higher status enjoyed by the persons buried. It is not improbable that they represent a sense of veneration for the dead although, as Dani feels, they themselves may 'not be meant for worship'. Dani, however, suggests that there may have been some 'totemic idea' underlying these urns, as also the human terracotta figurines[52] found ssmetime within the graves. All these possibilities and suggestions also go against the general practices of the Aryans. Then, at sites like Katelai the so called 'box-urns' containing cremated bones were also found.[53] These boxes were quite different from the urns of the Vedic period. In areas like Buner the burial urns containing bones both of the cremated and non-cremated post-exposure types were surrounded by dry masonry wallings. This practice was also completely unknown to the Vedic people.

The Swat Valley cemeteries are full of cists with child burials. One may try to correlate them with the references in the *Dharmaśāstras* according to which infants are not to be cremated, but in doing so one will have to face the problem of not getting any

---

49. Dani, *op. cit.*, p. 47. "Cremation is a later growth from ths earlier practice, well documented in the evolution of the pot forms. Our excavation at Timargarha is quite clear, providing stratigraphic evidence to separate them into two chronological groups."
50. *Ibid.*, p. 24.
51. *Ibid.*, p. 34.
52. *Ibid.*, p. 27.
53. Stacu, G. "Preliminary Report on the Pre-Buddhist Necropolises in Swat (W. Pak.)," *EW*. vol. 16 (1966), p. 47.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

reference in the texts pertaining to cists containing bones of children. The cists, if they are taken to be the 'four-cornered graves' of the *Śatapatha Brāhmaṇa*, have only rarely yielded any adult-burial.

The references to re-burial in the excavation report are many but they are also not the same as mentioned in the Vedic texts. The Vedic re-burial lies in taking out the bones from the primary burial-urns, depositing them in a pit and then erecting a monument over it. While the Swat Valley practice lies in the opening up of an already existing grave and putting into it fresh bones : it is in fact 're-use' of a burial and not 're-burial' as such. It may, however, also be mentioned that the people who cremated the dead bodies in the Swat Valley did not themselves practise re-burial ; each time they made a fresh grave and these were opened and re-used only by those who practised post-exposure burial.

Reference to flexed burials, so commonly found in the Swat Valley, excavation report, is practically nil in the Vedic literature.

Śatapatha Brāhmaṇa gave several details of the Aryan and non-Aryan funerary cairns or mounds, but the Swat Valley graves are practically devoid of cairns or mounds.

Lastly, the Vedic literature does not make mention of regular cemeteries containing large number of burial while the Swat Valley has yielded cemeteries more than the single graves.

At one place P. C. Pant says, "the megaliths of Banimilia-Bahera in District Mirzapur explored by us to a great extent agrees with the description given in *Śatapatha Brāhmaṇa*."[54] The details of the site have already been given in the preceding pages in the light of which it may be seen that there is hardly any positive evidence to suggest such a correlation.

Banerjee feels that the Vedic references (already mentioned in the preceding pages) make it clear that the Aryans had the knowledge of some of the megalithic monuments, e.g., the urn burials, cairns, stone-circles, etc. The author is, however, in agreement with Pant that the references in the *Śatapatha Brāhmaṇa* cannot be quoted in favour of megaliths. The Aryans never raised any monument on the burial urns ; they erected it only on bones, kept either in a pit or on the ground.

54. *IP*: 1964, p. 208.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

SUMMARY AND CONCLUSIONS

The Swat Valley, for long, was known primarily for the Gandhara Art of the early centuries of the Christian era. It is only during the last decade that we have come to know of the existence of a protohistoric culture going back to the middle of the second millennium B.C. Unfortunately, our knowledge about this culture is more or less exclusively based upon the material unearthed from the graves. There are only two habitational sites worth quoting—Balambat and Ghaligai. The site of Ghaligai Rock Shelter is, of course, the classic site for the whole region since it has given a complete sequence of protohistoric cultures in the valley, including those phases which are represented in the graves.

The Swat Valley graves, according to Stacul, belong to at least three periods (i) Bronze Age (1600-1000 B.C.) (ii) Early Iron Age (1000-600 B.C., and (iii) Middle Iron Age (600-400 B.C.). Dani has, however, divided them into four periods: Period I of Stacul has been divided into two : I=16th to 13th century B.C. and II=13th to 10th century B.C. The two divisions of the Iron Age are common to both the schemes of periodization. Whatever stratigraphic considerations Dani might have taken into account in this connection one thing is clear ; he was over-enthusiast in solving the Aryan problem archaeologically. He, therefore, visualized two migrations into India, one of the Rigvedic Period (the period of *ayasa*=copper) of the 16th-15th centuries B.C., and the other of the Mahābhārata period (the period of *Kṛṣṇa ayasa*=iron) of the 10th-9th centuries B.C. This he correlated as follows[55] :

pds. I + II =Rigvedic
pd. III =Mahābhārata
pd. IV =Achaemenian

However, the whole hypothesis is premature and the evidence of graves does not support it. During this unusually long period, the people practised Cremation, Complete Inhumation and Fractional Burial. Their sepulchral monuments included Stone Circles, Pits lined with stones, and Urns. Interestingly enough, some of the graves, called 'Mixed Burials', contained the skeletal remains and offerings of two different periods. In the Indian context, these are unique. Similarly, some of the burial urns with human facial features, called 'Visage Urns', are rare in India. They are reported either from a few Palestinian caves of the 4th millennium B.C.[56] or from Khurab, Bampur and Katukan in the Persian Makran of the 2nd-1st millennia B.C.[57]

---

55. Dani., *op. cit.*, pp. 51-55.
56. Anati, E., *Palestine Before the Hebrews.*
57. Stein, A., *Archaeological Reconnaissances in North-Western India and South-Eastern Iran*, pp. 106-10.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The graves meant for child burial were dug at one end of the cemeteries. They were either small cists of single stone orthostats or pits lined with dry stone masonry. In either case, they were covered with multiple capstones and oriented in the direction of the slope of the hill on which the cemeteries were established. The grave-goods mainly consisted of incised pots of grey and red wares. They, however, also included objects of bronze, silver, gold, bone and semi-precious stones.

Dani has made a good study of the functional aspect of some of the pot-types from the graves. On the basis of this study he has suggested the nature of some of the burial rituals. They are as follows [58] :

(i) There is a typical cooking pot which is likely to have contained some type of food for the dead.

(ii) The bowl-on-stand was an offering vessel. In one of these bowls the skeleton of a snake was found. In the Persian Gulf area during the mid-Ist millennium B.C., there is a definite evidence of snake-offering.[59] But they are likely to have carried other food items as well, such as cattle meat, as is attested by the bone pieces found in these graves.

(iii) The tall drinking vases also seem to be the vessels used in offering liquids to the dead. A small cup with a hole at the bottom might have been a pot used for libations. Handled vase with pinched mouth also seems to have served the same purpose.

(iv) Food-disc or *thālī* is another pot for keeping the dry food items.

(v) Shallow bowls of various shapes and sizes are likely to have carried items like curry.

The Swat Valley graves, on the whole, represent the emergence of a tradition unconnected with the Baluchi Chalcolithic Culture or the Harappa Civilization. It, however, shows cultural links with northern Iran and Central Asia as is attested by pot shapes and copper and iron objects.[60] But as far as the burial customs are concerned, they formed an individual identity of their own and represent a complex totally different from those in Western Asia and Central Asia.

---

58. Dani, *op. cit.*, pp. 35 and 36.
59. Glob, P. V., "Snake Sacrifices in Baharin's ancient capital", *Kulm*, 1957, p. 125.
60. *Ibid.*, p. 25. See also, G. Stacul, " Excavation near Ghaligai (1968) and Chronological Sequence of Protohistorical Cultures in the Swat Valley", *EW*, NS, vol. 19 nos. 1-2 (1969), pp. 44-91 and, C. S. Antonini, "Swat and Central Asia", *Ibid.*, pp. 100-115.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PART II

THE CEMETERIES OF EASTERN U.P. AND RAJASTHAN

Nearly a century ago, Cockburn[61] and Carlleyle[62] had extensively explored the regions of eastern U.P. and Rajasthan and reported the presence of cairn-fields at a number of places. Their work was, however, followed up by regular excavations only in 1962-63. G. R. Sharma[63] excavated the site of Kakoria in District Varanasi and A. K. Narain[64] dug at Banimilia-Bahera in District Mirzapur. Sharma dates the graves of Kakoria to 1500-700 B.C. and places them in the Neolithic-Chalcolithic period.

In the following year Sharma excavated a new site called Kotia, in District Allahabad. The graves here yielded a large number of iron implements. Although only one C-14 date is available from this site, which falls in the 2nd century B.C., the excavator places the cemetery in 600-200 B.C. bracket.[65] There are a few other sites explored recently on the tributaries of the Ganga. They cover the districts of Varanasi, Mirzapur, Allahabad, Banda and Agra. At Deodhoora in District Almora Carlleyle had long back reported a few cists.[66]

Such Vindhyan cairns are also reported from Dausa, District Jaipur, Rajasthan.[67]

At Burzahom[68] and a few other sites in the Kashmir Valley, free standing memorial stones, called menhirs, have been discovered. At Leh in Laddakh, graves made of stone slabs are also reported.[69] At Asota, near Mardan in the North-West Frontier Province of Pakistan, there is a group of menhirs arranged in some rough alignment which too has been included in the category of megaliths.[70]

Near Karachi in Sind there is a group of cists which is associated with the megalithic complex.[71]

---

61. Cockburn, J., "On flint Implements from Kon ravines of South Mirzapur", *JASB*, vol. LXIII, pt. 3, (1894), p. 21.
62. Carlleyle, A. C. L., "Report on a Tour in East Rajputana in 1871-72 and 1872-73", *Ann. Rept. ASI*, vol. VI (Cal. 1878), pp. 36-38 and 104-8.
63. *IAR*, 1962-63, pp. 39-41, and *IAR* 1963-64, pp. 57-58.
64. *IAR*, 1962-63, p.38.
65. *IAR*, 1963-64, p. 40.
66. Henwood. W. J., *Edinburg New Philosophical Journal*, NS (1856) pp. 204- 5.
67. Carlleyle, *op. cit.*, pp. 104 ff.
68. H. De Terra, "Excavations at Burjahama", *Miscellanea of the American Philosophical Society*, (1936). Also, *IAR*, 1960-91, p. 11
69. Francke, A. H., *Annl. Rept. ASI*, 1909-10, pp. 104 ff.
70. Gordon, D. H., *JIAI*, NS, I, 1945, p.18.
71. Cousens, H., The Antiquities of Sind, *ASI, Imperial Series*, vol. XLVI (1929), pp. 44-5.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

At Amreli in Gujarat a number of cairns have been excavated which too are claimed to be megalithic in origin.[72]

These and some still others are used in one way or the other in support of one's desired theory regarding the origin and spread of Indian megaliths. Not that they are necessarily incorrect, but there is no way to prove their correctness either. They are enigmatic. We are completely in the dark about the date of many of them—they may be very ancient or they may be absolutely recent in origin. Erecting megaliths of such types is a living practice in the tribal populations all along the Himalayas. They are, then, situated so widely apart. and the cultural material in them, as also the mode of disposal of the dead, are so varied that one cannot deal with them under a single heading without running the risk of being accused of adopting an illogical approach.

We have. therefore, chosen to give a slightly detailed account of the recently excavated burials in two homogenous regions, viz. U.P. and Gujarat and only touch upon the rest.

Kakoria

The site is located on the Chandraprabha, in District Varanasi. Its importance lies in the fact that it has both a cemetery and a habitational area (Plate XXXII). On the whole, 12 graves were opened, and 4 trenches were laid in the habitational area.

HABITATIONAL AREA

The habitational deposit at the site is about 1·40 metre thick. The entire accumulation is of a single culture-complex although it has been divided into three phases. The earliest phase (A) is characterized by microliths, such as blades, lunates and points, ill-fired red ware, and mud-houses of which only two rooms were unearthed. The middle phase (B) yielded, in addition to the above material, excepting the rooms, a copper ring, sling stones, pestles, beads of stone and terracotta, and crested-ridge blades. The last (uppermost) phase (C) is marked by the continuance of phase B material, but of an inferior workmanship. The upper-most level, however, yielded four copper pieces and some beads including etched carnelian ones. Iron has not been encountered in any of the trenches.

The pottery , on whose basis the site has been dated to the Chalcolithic period, includes red ware, black ware and a black-and-red ware, which 'resembles that at Sonpur and Chirand in Bihar,' as well as that 'from the Chalcolithic sites of Malwa, Rajputana and the Deccan'. According to the excavator 'some of the types survived in the modified forms in the Painted Grey and N.B.P. Wares.'[73]

---

72. Rao, S. R.,"Excavations at Amreli, *Bull. Museum and Picture Gallery, Baroda*, vol. XVIII (1966),
73. *IAR*, 1962-63, p. 41.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The picture presented by the excavated material is that of a village of mud-houses in which hunting and fishing communities lived over a prolonged period. In course of time agriculture was also introduced. Minor arts of bead making and copper smelting were, however, not neglected. That such a primitive society discharged its duty towards the dead is amply testified by the innumerable graves found in the cemetery

THE CEMETERY

Of the twelve graves excavated, there were eight Pit-Cairns and four Cist-Cairns ; the stone-circles round the cairns were, however, not very well marked.

GRAVES

Pit-Cairns : The pit-cairns varied in diameter from 3 to 9 metres, and in height from 1 to 2 metres. The pits below the cairns were usually rectangular or oblong with longer axis running north-south ; only in a few examples the orientation is found east-west. These were usually 1'52 metres in depth. The floors were generally paved with red sand or the local earth.

The skeletal remains found in them have always been fragmentary ; probably, they were post-exposure in nature. Significantly enough, in a number of examples not a single bone has been found ; in others, where the bones were found, the skeletal remains hardly count for 3 or 4 pieces of bones. In Meg. IX, for example, a few 'highly damaged bones', placed side by side in parallel lines were found along the southern edge of the pit.[74] The grave-offerings, placed on the floor, consisted of items like microliths, stone beads, gold objects and earthen pots. In Meg. VIII the offerings were found placed at different depths. As a rule, the pits were sealed with the self-same earth but in Meg. I and IX black cotton soil was brought from a distance and used for this purpose.

In one of the pit-cairns, the rectangular pit had four small horizontally laid slabs one at each of the four corners. It reminds us of a similar feature in the pit-circles at Brahmagiri where their presence has been interpreted in terms of a bier whose legs they supported.[75] A similar situation may also be visualized here, of course, if the bier theory is correct.*

In one instance, a pit was found within a pit, a feature again reminding us of a similar example at Brahmagiri[76] (Plate XXXIII).

---

74. *IAR*, 1963-64, p. 57.

75. Wheeler, R. E. M., "Brahmagiri and Chandravalli", *Anct. Ind.*, no. 4 (1947), p. 196.

* See, Banerjee, N. R., for rejecting the theory. *Ant. Ind.* No. 12 (1956), pp. 27 and 28.

76. *Ibid.*, p. 199. See. pl. XCIX, Pit-Circle VII.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Cist-Cairns : The cairns in these examples had rectangular pits lined with stone slabs (Plate XXXIV). The orthostats, the flooring and the cap-stone were made of multiple slabs and not of single stone slabs unlike south Indian examples (Plate XXXV). examination of the A close slabs shows that they were not mechanically produced by men but were the products of natural weathering. Naturally, men in the Vindhyas had no control over the size of the stone-slabs used.

The bones and offerings, both extremely few, were placed on the floor. The excavator reports 'a few indeterminate sherds and a fragmentary human tooth', in one example. Meg. X did not yield any bone ; it contained only a few pot-sherds and four slabs of indeterminate use. In some examples, only a few bones were found, there being no pots placed within them. In Meg. III a gold ring was found along with microliths and pottery. Significantly, the pottery was wheel-turned.

Banimilia-Bahera

The site is situated on the Jargo, between the villages Banimilia and Bahera, in the Jagan Mahal area of Tehsil Chunar, District Mirzapur. It was explored by Carlleyle and excavated by A. K. Narain. The site has both a habitational area and a cemetery.

HABITATIONAL AREA

Two trenches were laid in the habitation area. They reveal two levels of occupation—the lower is characterized by ill-fired red ware and the upper by black-slipped and a black-and-red ware. But in the opinion of the excavator 'the stratigraphy needs further checking.'[77] In fact, very little is known about the habitational pattern of the people. In all likelihood, it was not different from that at Kakoria.

THE CEMETERY

By and large, the graves here compared well with those at Kakoria. Narain divided them into four types following the old terminology suggested by Carlleyle.

BURIAL TYPES

(i) *Cairns* : These are heaps of stones topped by single or multiple capstones.

(ii) *Cairn-Circles* : These are not defined by the excavator but the term suggests a cairn surrounded by a circle of stones.

(iii) *Cists* : These are pits lined with stone slabs and sealed with cairns of stones.

---

77. *IAR*, 1962-63, p. 39.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

(iv) *Tumuli* : These are rectangular or oblong chambers made of dressed stones, with a single or multiple capstones. These monuments are covered with cairn-stones, sometimes mixed with mortar.

Types (i) and (ii) seem to be Pit-Cairns while types (iii) and (iv) are the variants of Cist-Cairns.

In all, five graves were dug at the site, three of type IV and one each of types I and II. Excepting one, none of them yielded any skeletal remains. The chambers were oriented east-west. They were broader and higher on the west and narrower and lower on the east. This feature compares well with that observed in some of the examples in the Buner region of the Swat Valley. The grave-goods consisted of only pottery, neither copper nor iron objects have been found, so far. Meg. III (Type IV) is important for its structure. While the eastern side was made of a single stone slab, the other sides were made of stone masonry of two courses. Meg. IV of the same type is important for its size : the chamber measures 2·54 x 6·7 metres. Meg. I, also of the same type, has its orthostats of multiple stones. Meg. V (Type II) is a typical dolmen standing directly on the rock-surface and covered under a heap of cairn stones.

Chunar

The site is situated on Jhurgi Nadi near the town Chunar, District Mirzapur. It was initially explored and excavated (only one cairn) by H. P. Lemesurier in 1867.[78]

The excavated cairn was found entombing a cist which is like Meg. III of Banimila-Bahera. While its western orthostat was made of a single stone-slab measuring 1·30 metre x 46 cm., the three other orthostats were built of 3 courses of dry walling. The top was covered with a capstone made by joining several stone slabs. The cist measured 2 metres in length 61 cm. in breadth and 46 cm. in depth. It did not yield any item of offering.

The details of the graves from the three sites in Districts Varanasi and Mirzapur mentioned above indicate that the people who erected the graves belonged to one and the same cultural group. Thus, if Kokoria belonged to the Chalcolithic culture, the other two sites may equally belong to the same complex. We are, however, not at all sure about the dates of these sites.

Kotia

The site is situated in District Allahabad, on the Deoghat-Allahabad highway running along the right bank of the Belan. The cemetery consists of more than 300

78. Lemesurier, H. P., *Proceedings, ASB*, no. X (1867), p. 164.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

graves of which only five have been excavated. Of these, four are Cist-Cairns and one is a Pit-Cairn.

Cist-Cairns : The excavator, G. R. Sharma, has divided them into two categories: (i) Unichambered cist and (ii) Trnasepted cist.[79]

The cists were rectangular pits, about 60 cm. deep and lined with multiple stone slabs. The lining stones, in most of the cases, form dry walls of two to three courses. There is one interesting feature about them. 'As the sides of the pit were slanting, very often, an offset was provided between two successive courses of the cist-wall to cope with the requirements of the pit.' Curiously enough, neither the floors were found paved with stones nor the cists were covered with capstones. Similarly, the suspected bounding stones round the cairns were hardly bigger than the cairn-stones. The unichambered cists contained only one lined pit while the transepted cists had an additional lined pit along one of its sides.

Pit-Cairn : The only example of a pit-cairn was not much different from the cist-cairns. In shape and depth, the pits in both the cases were alike. The form of the cairn was also the same. The only difference observed lies in the lining of the pits—in the 'cist-cairns' the pits were lined with stone-slabs while in the 'pit-cairns' they were not.

It is significant to note that the graves have yielded very few human bones. Instead, they contained a large number of bones of domesticated animals such as the pigs, sheep and cattle. These animal bones bore prominent marks of cut, probably, indicating ritualistic slaughter of animals. This feature was specially noted in the case of bones from Meg. I. It is also to be noted that some of the bones from Meg. I and V show traces of burning. This would indicate the performance of some funerary ritual of fire.[80]

The potteries they yielded include a black-and-red ware and coarse grey ware of thick fabric. They include types like hollow and solid pedestal, sharply carinated cooking vessels, knobbed lids, large elliptical jars, bowls with ledged shoulder, etc. Some of these types, particularly the cooking vessels, have no parallels at Kakoria or Banimilia-Bahera.

The graves at Kotia have yielded a number of iron implements. They include types like adzes, spearheads, sickles and arrowheads. Most of them came from Meg. I alone.[81] Below are given the details of two interesting megaliths.

Meg. I is 'transepted megalith', a fairly extensive monument, unlike any other in the Vindhyan region (Plate XXXVI). It is divided into two portions by a line of

---

79. *IAR*, 1963-64, pp. 49-51.
80. *Ibid.*, p. 41.
81. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

stones and there is no provision to inter-connect them. The two portions look like two large chambers. The large number of animal bones as well as the large number of iron objects which were discovered in this grave make it an outstanding sepulchral monument exposed so far in the region. In a corner of a room the excavator discovered a few human bones of a single person. Who could be this person is anybody's guess. May be, he was the headman of the village. Meg. V (Pit-Cairn) is marked by a 38 cm. thick deposit of ash which covered the grave offerings consisting of pots, an iron spearhead and a few bones.

In the Allahabad District, particularly, on the rivers Belan and Tons, and their tributaries like the Seoti in Koraon and Meja Tehsils, a number of other cairn sites have been located by G. R. Sharma, and they all seem to belong to the Iron Age.

The cairn-burials in the Vindhyan region as a whole show a general uniformity in structural details whether they are supposed to belong to the Chalcolithic period or the Iron Age. There may, however, be site-preferences, e.g., dry walling of the graves was favoured at Kotia and Banimilia-Bahera but not at Kokoria. Similarly, capstones were not favoured at Kotia but they were present at other sites.

Curiously enough, while the Kotia graves have yielded iron implements, Kakoria and Banimilia-Bahera graves have not yielded any copper implement even though they are supposed to belong to the Chalcolithic period. Almost similar is the situation with regard to the earthen wares. While black-and-red ware, black ware and red ware are common to the burials of both the periods, the coarse grey ware cooking pots are exclusively found in the Iron Age graves at Kotia.

SITES IN DISTRICTS BANDA AND REWA

In addition to the sites in Districts Allahabad and Varanasi, G. R. Sharma has located a cairn burial site on the Jhurri Nala in Tehsil Karvi of District Banda. Similarly, he has also located a site near the Chachai Falls, District Rewa, Madhya Pradesh. But at none of these sites any digging has been undertaken.[82]

Khera

The site is located near the village Khera, about 7 km. west of Fetehpur Sikri, District Agra. Carlleyle, who explored the site first, found 'round topped' cairns concealing shallow, oblong, trough shaped cavity made on the solid rock. One of these cairns yielded calcined bones and ashes. He also discovered some flat-topped cairns, entombing square cists made of several stone-slabs. These cists also yielded

82. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

calcined bones and charcoal pieces.[83] In his recent re-explorations of the region, P. Singh located a few more cairns measuring 2·9 metres in diameter and one metre in height. The explorer had some genuine doubts in their supposed antiquity[84] because the cairn stones were comparatively fresh in look ; while the edges were sharp, neither patination nor weathering was noticed.

Satmas

The site is situated about 30 km. from Fatehpur Sikri and 3 km. from Jagner in District Agra. Carlleyle discovered the cairns with round tops and cairns with flat tops perched on the Satmas hills. The former, measuring 3 to 3½ metres in diameter, entombed sepulchral troughs excavated in the bed-rock. The latter, measuring 1·30 to 2 metres in diameter and 1·5 metres in height, entombed multiple slabbed cists. The dry stone walling was made of broken slabs. The excavator found post-cremation burials as well as some complete inhumations in these cairns. The report is, however, specific regarding the former : the evidence recorded for the latter is too meagre to make out the real position.[85] Recently, P. Singh has re-explored the region and located a small cist of four stone-slabs.[86]

In terms of the Vindhyan typology of the cairns, there are pit-cairns and cist-cairns at Khera and Satmas also.

Dausa

The site is located about 55 km. east of Jaipur, on the Jaipur-Agra road. Carlleyle located Menhirs and Menhirs-in-cairns besides pit-cairns and cist-cairns. The cairns were generally surrounded by stone-circles. He has also reported a square cist of single-slab orthostats capped with two stone slabs. It measures 2 metres in length and breadth and 1·3 metres in depth. The whole monument was surrounded by a stone-circle. Two stone-circles, each with a menhir in the centre, one measuring 7 metres and the other 1·61 metres in height, were also located at this site. In one example, a 6·25 metre high menhir was found in the neighbouring fields. In another example, a cairn was found surrounded by a stone circle. The cairns yielded only some calcined bones and ashes.[87] Recently, P. Singh re-explored the region but could not locate many of these monuments. He, however, picked up a few ill-fired pot-sherds near a cairn which may or may not belong to the graves.[88]

---

83. Carlleyle, *op. cit.*, p. 13.
84. Singh. P., "Megalithic Remains in the Aravallis", *Puratattva*, No. 2 (1968-69), p. 46.
85. Carlleyle, *op. cit*, pp. 33-39.
86. Singh, *op. cit.*, p. 46.
87. Carlleyle, *op. cit.*, pp. 104 ff.
88. Singh, P., *op. cit.*, p. 48.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

These and some other cairns in the Vindhyan region of Uttar Pradesh and Rajasthan are at present difficult to date. They, however, seem to be nearer to the Kotia cairns of the Iron Age than the Kakoria graves of the Chalcolithic period.

PART III
THE GRAVES OF NORTH-WESTERN INDIA

Leh

A. H. Francke discovered in 1903, in the Leh Valley, Laddakh, a few cists buried a metre below the ground. They measured about 2 metres in length, 45 cm. in breadth and 2 metres in depth. The sides were made of masonry walls of unhewn stones. The cists were capped with stone slabs usually measuring 1·45 metres in length and 45 cm. in breadth. When excavated, they yielded human bones and offerings. One of them contained 15 to 20 skulls and a few long bones. The grave offerings consisted of handled earthen pots painted with red colour, bronze utensils, implements, buttons, round and oblong beads, a seal and a few iron objects. The graves, at least a few of them, therefore, seem to be collective in nature.[89] It is not possible to give any precise date to these cists although they have been ascribed to the early centuries of the Christian era.

PART IV
NECROPOLISES IN SIND

Karachi

The region round Karachi has been explored several times. Thus Captain Preedy had discovered in 1857 on the hills, near a place known as Waghodur,[90] a few slabbed cists, but without port-holes. In 1929 Cousens also reported some of these cists.[91] Frere found them on road from Karachi to Kotri and also on road from Kotri to Shah Bilawal in Baluchistan.[92] Wheeler again trekked the same place and reported cists without port-holes.[93] In contrast to these findings, Fairservis is reported to have seen at least one example of port-holed cist near Karachi.[94]

---

89. Francke, *op. cit.*, p. 105.
90. Preedy, *J. Bom. Br. RAS*, vol. V (1857), pp. 353ff.
91. Cousens, *op. cit.*, p. 44.
92. Frere, H. B. E., *Bom. Br. RAS*, vol. V (1857), p. 349.
93. Wheeler, R. E. M., *Early India and Pakistan*, p. 159.
94. Dikshit, K. N., "The Origin and Distribution of megaliths in India", *SPPMI*, p. 9.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Wheeler has given a few details of one of these cists located in the sands on the Shah Bilawal road : it is slightly less than 2 metres in length with its major axis running north-east to south-west. He has reported some other cists, about a metre in length, and surrounded by stone-circles. One of these circles measured nearly 9 metres in diameter.

Some attempts have been made to associate them with the south Indian megaliths but in the absence of typical port-holed cists in some quantity the suggestion cannot be pressed for the present. We are, in fact, not in a position to date the Karachi cists although their importance, because of their location, cannot be minimized.

PART V

A SITE IN GUJARAT

Amreli

The site is situated near the town Amreli in Saurashtra, Gujarat. It was long back explored and excavated by H. Shastri.[95] In recent years it has been re-excavated by S. R. Rao.[96] The excavated trenches in the habitation area have revealed the existence of two culture-complexes—one, in the lower levels, belonging to the Chalcolithic period, and the other, in the upper levels, belonging to the Iron Age.[97] There is, however, a definite stratigraphic break between them, and, therefore, the two cultures were hardly generically related. Of the six trenches laid at the site, only Amreli I and VI have yielded burials.

CHALCOLITHIC BURIALS

Amreli I

Only two burials were encountered in this trench. Both of them were Urn Burials,one (UB 1) contained calcined bones and some ashes, and the other (UB 2), only unburnt bones. Thus, cremation and burial both were in vogue.[98] Below are given the details of these burials.

Post-Cremation Burial

UB 1. Adult Burial : Urn Burial No. 1 contained the cremated bones of an adult. The grave goods consisted of two fragments of beaten copper and a flake of

95. Shastri, H., *Annl. Rept. ADB*, 1934-35 and 1938-39.
96. Rao, S. R., *op. cit.*
97. *Ibid.*, pp. 64-67.
98. *Ibid.*, p. 36.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

agate, crudely worked into a point. The urn was deposited in a pit of about 55 cm. in depth and 45 cm. in diameter.

Complete Inhumation

UB 2, Child Burial : Urn Burial No. 2 contained the skeleton of a child. The bones were not charred and there was no ash in it. The urn was deposited in a pit, 61 cm. deep and 45 cm. in diameter. It is said that there were a few more urn burials which could not be excavated due to the paucity of time.

According to the excavator, 'in terms of geographical distribution the cremation burials of Kulli (Baluchistan) are the nearest parallels to it.'[99] It may, however, be emphasized that the parallelism quoted here does not imply any generic relationship between the two. The urn burials at Amreli are entirely different from those found in the Chalcolithic Deccan and western India. While the Baluchistan sites yielded crematory remains of adults and children, the Deccan and west Indian urn burials produced only non-crematory bones of children ; the adults were buried in pits.

IRON AGE BURIALS

Amreli-VI

Post-Cremation Burial

Pit-Circles : The pit-circles, round or oval in shape, measured about 110 cm. in diameter and 45 to 75 cm. in depth. They were found covered with cairn stones surrounded by stone-circles (Plate XXXVII). When excavated, they yielded funerary vessels and offerings of iron objects, shell bangles, terracotta beads and pots of Red Polished Ware belonging to the early centuries of the Christian era at a number of sites in Gujarat. On the whole, seven pit-circles were excavated out of which one was found intact, two were slightly disturbed and the rest were almost totally despoiled.[100] Below are given important details of some of these sepulchral monuments.

Burial No. C 2 was quite interesting in as much as there were two pit-circles enclosed by a single stone-circle. Pit A : it was 46 cm. in diameter and it contained ashes, a shell bangle and a jar of Red Polished Ware. Pit B : it was 50 cm. in diameter and it contained ashes and an iron arrowhead. Burial No. C 3 has been marked by two stone-circles, the outer one, which was oval, had its longer axis 1·80 metres long. The inner circle, which was round, measured 91 cm. in diameter. Burial No. C 4 was intact. The stone-circle was oval with its longer axis measuring 2·40 metres. The pit

99. *Ibid.*
100. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

in the centre was 1·20 metres in diameter and 91 cm. in depth. It too yielded ashes, a bowl and a jar of Red Polished Ware. Burial No. C 5 was the largest grave with its longer axis measuring 4·20 metres and shorter axis 3 metres. It contained enormous quantity of ash, probably, indicating mass cremation. The grave-goods included 7 pots. Burial No. C 7 was marked for its cairn-stones laid in two courses (Plate XXXVIII). The pit contained ashes, an iron sword, an iron arrowhead (?) and a broken shell bangle.

S. R. Rao feels that 'they resemble more or less the cairn burials of the Indo-Iranian borderland.'[101] At another place he further reiterates it by saying that 'the successors of the cairn-builders of south Baluchistan, who also practised cremation burial, appear to have exercised considerable influence over the Amreli folk in the beginning of the Christian era. The spatial and chronological gap between the cairns and pit-circles of south Baluchistan on the one hand and those of Saurashtra on the other may be fillled by the megaliths reported from Karachi area.[102]

The hypothesis put forward here, however, has some obvious difficulties to reconcile with. Firstly, although the cairns existed in both the regions they need not be genetically related, particularly, when the Amreli cairns are distinctly surrounded by stone-circles but they are only rearely so in Bauchistan. Secondly, the grave-goods in both the regions belong to two entirely different complexes. Finally, as far as the Karachi megaliths are concerned they are cists and and not cairns over pits. In spite of these difficulties the discovery is extremely important because of is location—midway between Baluchi Makran and the Western Ghats.

SUMMARY AND CONCLUSIONS

The burials and cemeteries in northern India are varied and divergent. They lack homogeniety both in typology and grave-goods. Still, they do show a certain amount of regional uniformity. Thus, those in the Vindhyan region do exhibit a marked closeness; as also those in the neighbourhood of Karachi and in the Kashmir Valley manifest their own group-similarities. Curiously enough, the sepulchral monuments from Amreli in Saurashtra to Varanasi in U.P. are, by and large, cairns. They are post-cremation as well as non-cremation burials. These similarities, however, are of very general nature. In details, the Saurashtra cairn burials differ widely from those in the Vindhyan region. This difference is marked both in the Chalcolithic (?) burials and the burials of the Iron Age. Thus, while the cairns in Saurashtra are surrounded by one or more stone-circles, the Baluchistan or the Vindhyan cairns

101. *Ibid.*, p. 38.
102. *Ibid.*, p. 47.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

are largely without the stone circles. On the other hand, while the Vindhyan cairns are often reported with capstones, the same is not true of the cairns in the other two regions. Similarly, the underground rectangular pits, lined pits, cists and troughs made on the bed-rock are all peculiar to the Vindhyan region and are not found in the remaining two areas. One may go on enlarging this list endlessly but what really emerges out of it is that there is a marked difference between the cairns of all the three regions. This considerably reduces the possibility of their being generically related. This observation gains further support from the fact that the grave-goods in the cairns of all the three regions differ considerably. But the same may not be true of the stone-circle. The tradition of surrounding graves with stone-circles is likely to have some connection with the Swat Valley stone-circles and the latter in turn, may not be far removed from a similar (megalithic) tradition in the Mediterranean region. This, of course, is largely hypothetical for the moment because direct links amongst them are missing.

S. R. Rao has observed that the cairns of Saurashtra were influenced by the megaliths of south India.[103] Banerjee saw in the cairns of the Vindhyas the origin of south Indian megaliths.[104] Rao's argument rests on the presence of stone-circles round the Saurashtra cairns. No doubt, these circles are often found round the south Indian megaliths, but they are not exclusively peculiar to them. The graves, in the Swat Valley have conclusively shown that in the 2nd and the 1st millennia B.C. stone-circles were incorporated in the graves which were hardly megalithic in origin. It is the contention of the present writer that although the idea of stone-circle might have been associated with the megaliths in a big way it did not either originate or remain confined to them. In the world context, the circles of stones or bones erected round the graves are reported from the Old Stone Age sites as well as from the sites of practically all the later periods. It is, therefore, necessary to judge each case on its own merits and unless positively proved a grave with a stone-circle need not be taken as 'megalithic'. Banerjee's arguments rest on his own views regarding the introduction of iron in India. According to him it came from the Baluchistan cairns to the Vindhyan cairns, and from them to the south Indian megaliths.[105] The position has, however, completely changed with the C-14 dates now available for the graves and the habitational deposits with iron implements at a number of places. The Swat Valley Iron Age graves are now dated to 855 B.C., the Vindhyan graves to 200 B.C. and

103. Rao, S. R., *op. cit.*, p. 47.

104. Banerjee, *The Iron Age in India*, pp. 64-67.

105. Banerjee, N. R., "Megalithic problem of India" *Studies in Prehistory*, p. 166. Recently, L. S. Leshnik has also put forward similar views in "Early Burials from the Nagpur Distt., Central India", *Man*, vol. no. 3, pp. 498 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the megalithic deposits at Hallur, in Mysore, to 1000 B.C. Thus, if the supposed date of 800 B.C. for the Baluchistan cairns is correct, the entire sequence imagined has become not only reversed but also redundant the Swat Valley and Hallur graves are older than the cairn burials of Baluchistan. As far as the cairn burials of U.P. are concerned, Saundara Rajan has called them "the degenerate extensions of the 'megalithic' cycle in India." He has based his views on the following grounds :

(a) The presence of the black-and-red ware is only very feebly and indistinctively attested, as one among many other crude and refined red-and-black wares.

(b) The tombs themselves have a superficiality or stylization in their erection, without well formed chamber of circle stones. No port-hole is found in any of the type while Banaras area is said to show a general north-south orientation, although no finite orienting element is available. Allahabad area shows an east-west orientation, coursed rubble construction, heavy cairn pack, appearing almost like barrow-heads on the surface, with an indistinctive circle stone, lack of any clear cut mode of placement of burial furnishing in the tomb, all revealing a degenerate practice.[106] As said earlier, Banerjee's views are exactly opposite to it. According to him they are ancestral to the south Indian megaliths. All this confusion, to be true to the subject, is due to the extremely limited excavations of these cairns.

In the ultimate analysis, it is probably right to say that the north Indian megaliths and allied burials are a bit enigmatic. For the present, very little is known about them. Their chronology is difficult to determine. Probably, much more work is needed to understand their significance than hitherto.

The problem of correlating the archaeological data with the literary evidence of the Vedic literature has not been very successful as yet. Certain glimpses noted by different writers have not solved the problem. In fact, we have very little solid grounds to tred ; may be due to the fact that during the Vedic period cremation was the primary and popular mode of the disposal of the dead and it hardly leaves much to be detected unless structures were raised over the remains which, probably, only rarely happened.

106. Saundara Rajan, K. V., "Megaliths and Black-and-Red Ware", *SPPMI*, pp. 76 and 88.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 7

THE HALLUR CULTURE AND PENINSULAR MEGALITHS

Megaliths are the pyramids of the commoners. By and large, they are huge stone monuments entombing the bones of several persons collectively. They normally occur in groups, forming sepectacular cemeteries on the slopes of the hills or high grounds overlooking agricultural fields, valleys and tanks. They occur throughout peninsular India and their existence poses a major problem in more than one way. We are really unable to know, despite our more than a hundred and fifty years of study, their immediate source of origin, their exact chronology, the people who built them, their everyday life, economic pattern, religious beliefs, etc.

It is well known that although etymologically the term 'megalith' means 'big stones', all monuments included to day under this category are not built of stones. In the European context graves with timber construction have been included under this category.[1] Similarly, in the Indian context simple earthen urn and sarcophagus burials have also been listed as megaliths.[2] In the former examples it is the plan of the structure that was adopted as the criterion of a 'megalith' but in the latter it was the uniformity in the grave-goods which brought them under the category of megaliths. In fact, the term was 'originally introduced by antiquaries to describe a fairly easily definable class of monuments in western and northern Europe, consisting of huge undressed stones and termed in Celtic dolmens, cromlechs and menhirs. It has subsequently been extended to cover far more miscellaneous collection of erections and even

1. Van Griffen, *PPS*, vol, IX (1943), pp. 24-25.
2. Krishnaswami, V. D., "Megalithic Types of South India", *Anct. Ind.*, no. 5 (1949), p. 37.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

excavations all over the Old World and into the new".[3] The result has been unfortunate. The term has become a misnomer. Originally, the term stood for a grave. It was then extended to include some monuments which were supposed to be religious. And now in practice the term is applied to "monuments the use of which is known imperfectly or not at all, but which we presume were erected for some surperstitious, ritual or religious end."[4] It is, therefore, no more confined to the sepulchral monuments or memorials although it is still primarily applied to them. It should, therefore, be clear to us that we are using a term which is convenient rather than accurate, and whose connotation exceeds its strict lexicographical meaning.

Megaliths have been, probably, the only single class of burial monuments which have crossed the boundaries of several countries, continents and physiography. They are found not only in Europe but also in Africa and Asia. They are thus reported from Sweden, England, Germany, France, Spain, Italy, Algeria, Western Sahara, Somaliland, Abysinia, Palestine, Arabia, Georgia, India, Cambodia, Indonesia, Japan, Phillipines, etc. By and large, they are coastal in distribution although many of them have been found in the hinterland also. However, it must be remembered that there is no international type of megalithic pottery, implement or ornament and, therefore, there is no uniform megalithic 'culture' as such in existence.[5]

The time span that they cover is enormous. First they appear in the Neolithic period, a couple of hundred years earlier to 3000 B.C., and then they are met with in the Bronze Age in the middle of the 2nd millennium B.C. Upto this period they were confined to Europe and the Middle East. After this there seems to be a gap till we come to the early centuries of the Ist millennium B.C., when iron was introduced in India and megaliths were soon to be built for the first time. The tradition continued in a more or less unified manner till the early centuries of the Christian era.[6] Curiously enough, they are still being erected in several parts of Africa and Asia, including India, and many a time it becomes a real problem to distinguish the old from the new. Wheeler, therefore, called them 'a jungle of a problem.'[7]

---

3. Childe, V. G., "Megaliths", *Anct. Ind.* no. 4 (1947-48), p. 5.
4. *Ibid.*
5. Eyre, Edward (Ed.), *European Civilization*, vol. II, p. 182.
6. *Ibid.*, See also C. von Furer-Haimendorf, "The Problem of Megalithic Cultures in Middle India", *Man In India.* XXV (1945), pp. 73-86. See also, Madeine Colani's *Megaliths Du Haut-Laos*, (Paris, 1935).
7. Wheeler, R. E. M., *Early India and Pakistan*, p. 150.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Primarily, because of the known chronological data, the Mediterranean region has been accepted as the original home of megaliths.[8] It has sometimes been presumed that ancient traders took the tradition both to the west European countries and the Middle East.[9] Stuart Piggot has called the megalith builders as 'missionaries' and megalithism as 'religion'. He writes 'these are the architectural embodiments of a lost religion which included among its ritualistic requirements the building of monumental tombs to a prescribed formula so that they would serve as the appropriate setting for rituals whose nature must remain unknown except in the broadest sense.'[10]

There is a big gap in space between the Western and Indian megaliths. Strictly speaking, there is hardly any typical megalith between Georgia on the Black Sea and peninsular India. Some of the cists reported at Sialk in Iran and near Karachi in Pakistan fall slightly short of the known typology of Indians megaliths [11] However, even they are hardly reported in Mesopotamia, Northern Arabia and Afghanistan. The time and space gap is, therefore, at the root of many problems relating to the Indian megaliths. Discussions spread over some 350 monographs and articles listed so far[12] are mostly of an academic nature : the views expressed are generally the products of wild speculations and 'potato digging' and not of reality and systematic excavations. We have, therefore, tried to confine ourselves within the carefully recorded facts pertaining to monuments without caring for the ill-founded hypotheses and excavation reports of all types.

UNIFORMITY AND VARIABILITY OF THE CULTURE-COMPLEX

The megaliths of south India form a class by themselves. They are marked by a uniform list of grave-goods. It consists of iron implements, Black-and-Red Ware pots and objects of shell, stone and terracotta. At times it also contains objects of bronze, gold and silver. Of these, the first two items are diagnostic.

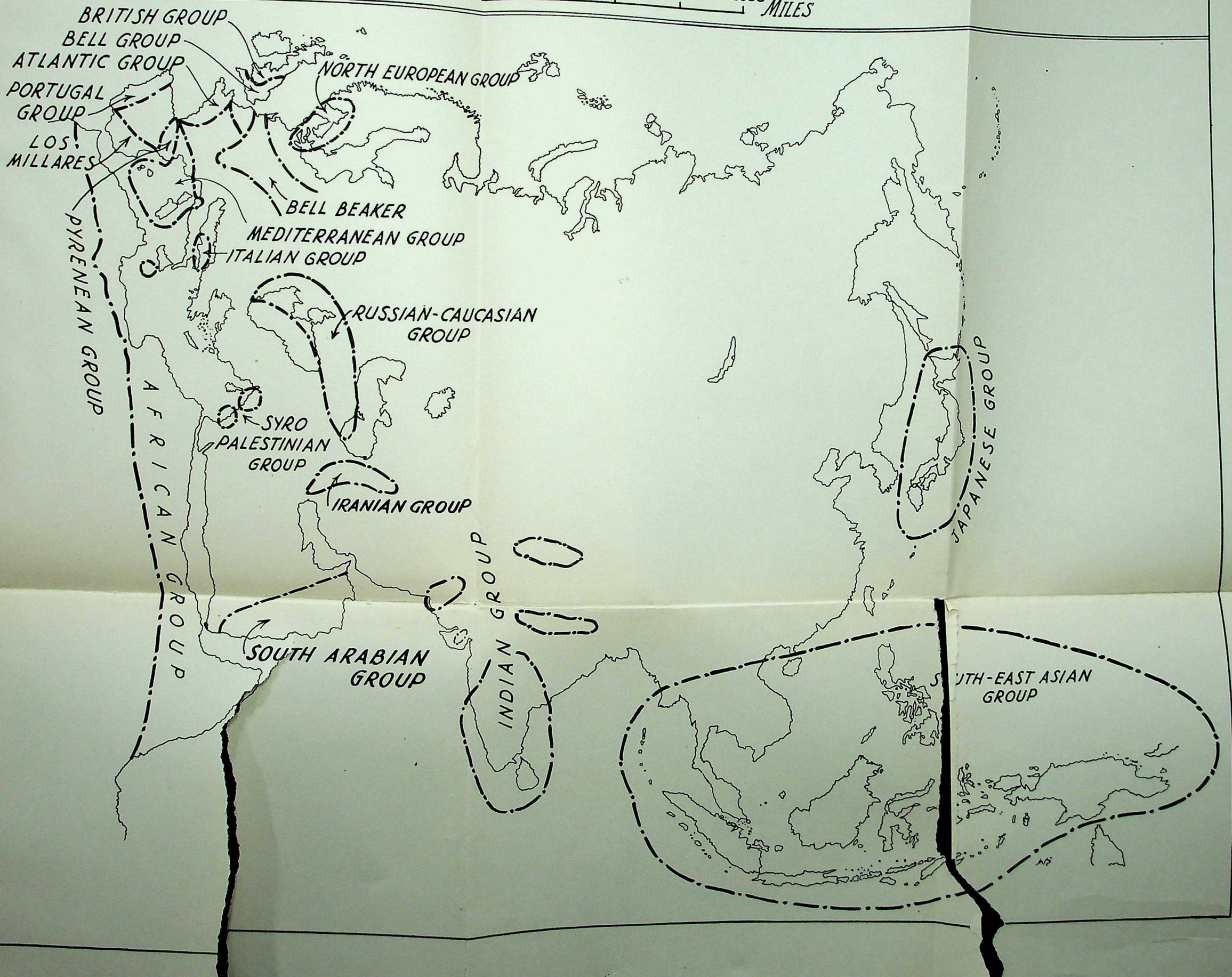
---

8. Childe, *op. cit.*, p. 12. See also, M. Steklis, "Les Monuments Megalithiques de Palestine", *Memoir of the Institute de Paleontologie humaine*, No. 15. G. E. Denial, "The dual nature of the Megalithic Colonization of Prehistoric Europe", *PPS*, N.S. vol. VIII, 1941.
9. Childe, *op. cit.*, p. 12.; also in *Trans. Glas. Arch. Soc.*, N.S., vol. VIII, P. 136.
10. Piggott, S., *Approach to Archaeology*, p. 95. Jaquetta Hawkes also said the same thing: 'We must picture a "megalithic idea", forming *essentially not a culture but a religion*, diffusing and becoming superimposed in many differing forms on a wide variety of cultures.' (*Antiquity*, 1934. p. 26)
11. Ghirshman, *Fouilles de Sialk*, vol. II. See also, Preedy, *Jr. Bom. Br. RAS*, vol. V (1857).
12. Ramachandran, K. S., "A Bibliography on Indian Megaliths", *JMS*, vol. 52, 1961 and vol. 53 of 1962-63, pp. 1-90. It has now also been published as a separate monograph by the Deptt. of Archaeology, Govt. of Madras. It lists 369 publications, although by now half-a-dozen more publications have already appeared.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

GROUPS OF MEGALITHIC AND ALLIED MONUMENTS IN EURASIA

0 500 1000 1500 2000 MILES



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Iron objects : The iron objects, typical of the megaliths, include flat celts with two fastening rings, socketed and barbed arrowheads with comparatively long blades, tridents, long swords and lances; spearheads and spikes, wedges, bill-hooks, sickles, hoes, horse-bits, etc. Of these, flat celts with rings, hoes with sockets prepared by turning the flanged ends inside, long swords with or without mid-ribs, tridents and horse-bits are diagnostic types. Most of them are found from Nagpur in Central India to Tirunevelli in south India, e.g., the celts with two cross-rings are found in the megaliths of Junapani, District Nagpur, as well as in the urn burials of Adichanallur, District Tirunevelli. Similarly, tridents are found both in the caves of Cochin on the western coast and in the burial urns of Tirunevelli on the eastern coast. One may not, however, imagine that all these types of tools are found everywhere. In fact, most of them have only regional distribution but their regions often cross several geographical and political boundaries, a fact which shows that these items migrated with the people to all sorts of lands they moved in. To quote an example of this type is the distribution of hoes. They are found from the eastern coast sites to the sites in Coimbatore in the west—a vast region easily divisible in two or three geographical areas.

Pottery : The pottery associated with the megaliths is much more uniformally distributed. The Black-and-Red Ware with a characteristic crackled appearance, probably, due to salt glazing, and with a large number of individualistic shapes, is almost universally found in the south Indian megaliths. The important types include tulip shaped vases ; funnel shapped lids, sometimes with ring-terminals ; elongated vases with carinated shoulder and long tapering body ; bowls with carinated body and almost pointed base. These types are also found in the red or black wares associated with the Black-and-Red Ware. These associated wares have also a few of their own characteristic types, e.g., hour-glass type ring stands, three or even four-legged jars, chalises, small to medium sized globular vessels, etc. These wares are largely wheel-turned, thick in section, not very well fired, slipped, and sometimes burnished or polished. Apart from these wares, which are, so to say, universal in distribution, there are a few wares which are regional. Thus, in the Coimbatore megaliths the associated red ware was found painted in white in concentric wavy lines round the shoulder of the pots treated with red slip. The paintings were characteristically coated upon by a russet coloured wash. Similarly, in Tirunevelli graves some of the pots of black and Black-and-Red wares have been found with white paintings. The patterns are linear, consisting of dots arranged in groups of slanting lines.[13] As some of the wares were regional in distribution so also ere

13. Subbarao, B., *The Personality of India*, Fig. 26.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

some of the pottery types ; although, these regions never coincided with the natural geographical regions. Thus, chalis, by and large, is found in Tamil Nadu and Andhra Pradesh megaliths alone.

So far as the bronze objects are concerned, they are largely concentrated in the graves of Tirunevelli[14] and Nagpur although they have been sporadically found at Sulur, Sanur, Kunnattur, etc. Interestingly enough, bronze lids found in the Tirunevelli graves are also found in the graves of Khapa, near Nagpur, and have a characteristically common feature : they are crowned with a group of birds in round.[15]

Shell objects decorated with linear patterns are more often found in the graves of Chingleput District, Tamil Nadu, than in the sites of other regions. Similar is the position with the terracotta animal figurines and stone objects like quern and pestle.[16]

'The Megalithic Culture'—An Unhappy Term

The repertoire of the antiquities from the megaliths is often designated as the 'Megalithic Culture', in the archaeological sense of the term. It is not a very happy usage since in the world context, the cultural repertoire has been changing from country to country. However, for want of a better nomenclature and in view of its repetition in the megaliths of south India. its adoption has often been justified at least in the Indian context. We hold a different view because of several reasons. Firstly, the cultural repertoire has been found associated not only with the megaliths but also with graves, frankly non-megalithic in origin. Secondly, now it is clear that the complex was not confined to burials ; it is found in the habitational areas also. Thirdly, no culture or civilization can express itself exclusively through the graves. Fourthly, the term 'Megalithic Culture' at once assumes universality of application while the nature of the cultural equipment has been found changing from region to region. B. Franco, therefore, aptly remarks that 'when certain scholars accompany the word 'civilization' with the adjective "Megalithic" they are limiting the very meaning of the term civilization, almost as if that certain culture expressed its ethos by the "megalith."[17] Fifthly, by using the term 'megalithic culture' for the repertoire of Black-and-Red Ware and iron tools, we unwitingly commit ourselves to a very awkward position, viz. that the beginning of this repertoire coincides with the beginning of the building of the megalithic monuments in this country, a hypothesis which may not at all be correct.

---

14. *Ibid.*
15. *IAR*, 1967-68, p. 34.
16. Banerjee, N. R., *et al*, "Sanur 1950 and 52", *Anct. Ind.*, No. 15 (1959), pp, 34-40.
17. Franco, B., "Notes on the Megaliths.....", *EW*, vol. 12 (1961), p. 258.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The term does not allow any flexibility for the field workers who might one day conclusively demonstrate that this complex was of the pre-megalithic period and the immigrant megalith builders simply adopted it on their arrival in this country. Recently, Leshnik has proposed a new term to designate this complex : "Pandukal Complex." He feels that "this expression has in its favour the fact that it is not burdened by any set of preconceived notions as to content. Its definition can without giving rise to anomalies, be conveniently extended to any aspect of the archaeological assemblage (e.g., Pandukal pottery rather than the curious formation 'Megalithic pottery'). Pandukal (Tamil : *pandu*—old man, and *kal*—stones, i.e., graves) is the traditional designation given to those burials in several parts of south India."[18] It is a good proposal but it also suffers from the same 'universality' and 'vagueness' which characterize the term 'Megalithic Culture' ; instead of 'Big Stones' the new term implies 'Old Man's Stones'. Not only that, the new term substitutes the old one only superficially, the one is a Tamil word while the other is an English word, both stand for the monument. The real issue is something else. It lies in the 'dichotomy of culture complex' and 'burial monument'. A term that denotes the monument cannot be extended to cover the culture-complex. It is more clear in the case of megaliths than in any other case. In every country the megaliths moved in, they adopted the existing local culture-complex. In England, Bell Beaker culture is associated with megaliths. That is why megalithism has been called a cult and a civilization. Moreover, the cultural equipment associated with the megaliths in India has now been found at Hallur in a context which seems to be pre-megalithic, *circa* 1000-800 B.C.

Clearly, no term which denotes only the megalithic burial monuments can be used for the associated culture-complex, particularly when the origin of this complex itself may now go back to the pre-megalithic times.[19] *I, therefore, propose the term "Hallur Culture" for the Iron Age Black-and-Red Ware assemblage which was adopted by the megalith builders on their arrival in south India.* The term is based upon the most accepted practice in archaeology in the absence of the direct evidence the place name of a typical site may be used to designate the culture-complex.

As already detailed, the cultural repertoire found in the south Indian megaliths is quite impressive and is marked by two types of objects, one that is often

---

18. Leshnik, L. S., "Early Burials From the Nagpur District, Central India", *Man*, vol. 5, No. 3 (1969) pp. 498-9.

19. I do not believe that the so-called megalithic culture-complex seen in the grave-goods came to India along with the megalith builders from outside; it was a pre-existing complex and on methodological grounds a complex cannot be, designated by an item of later association, as the 'megalith' is likely to be.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

used by agriculturists and the other that is generally used by soldiers and hunters. Thus, hoes, bill-hooks, plough-shares, sickles, quern-and-pestle, etc., are usually taken to be agricultural implements while swords, lances, spearheads, arrowheads, etc , are definitely the weapons of war and chase. Different types of horse-bits,[20] face-covers of horses[21] and horse-bones in the graves suggest that the people were horse-breeders and they primarily marched on horse-back ; wherever they settled down, they engaged themselves in agriculture. Rice husk found in the core of numerous clay vessels clearly shows that paddy was cultivated, probably on a large scale. Interestingly enough, in one of the graves at Brahmagiri an iron implement has been found which is called a 'Roman Coulter' by Dhavalikar.[22] Similarly, iron plough-shares have been recovered from the megaliths of Kampti, near Nagpur, and Yelleshwaram and Janampett in Andhra Pradesh.[23] These finds do show that in certain areas land cultivation was somewhat intensive. However, hand-tilling of small fields with short simple hoes seems to have been equally popular at several sites like Adichanallur. In most of the cases the megalithic cemeteries are found near ancient tanks. Krishnaswami and others have, therefore, postulated that the system of tank irrigation in south India was introduced by the megalithic folks. In recent explorations a few habitation sites have been located ; some of them have been excavated also. Although very little evidence has been gathered from them, yet it alone reflects the rural pattern of the settlements. Leshnik, however, feels that sickles, bill-hooks and hoes do not necessarily prove agriculture since they are multi-purpose tools. According to him the megalith builders were the nomadic pastoral people and not agriculturists.[24] I, however, differ from him on both the issues. Sickle may be a multi-purpose tool but it is primarily an agricultural implement. Similarly, bill-hooks are used not only in felling the branches of trees but also in 'shifting cultivation' (Jhum or Slash-and-Burn) in NEFA where this implement is used like a digging stick—making small holes in the ground (with the help of the pointed end), putting seeds into them, and finally covering them with soil. In the same region, hoes with pointed ends are used in digging *kankary* soil while hoes with broad functional ends are employed in digging light soil.[25] To me, therefore, they are the evidences of agriculture. No doubt, the people were on the march on their horses with swords, spearheads and lances but the population was increasing and not all of them kept on marching ; the presence of more than 250 cemeteries in a single district of Chingleput, Tamil Nadu, would certainly indicate

20. Ramachandran, K. S., "Bridle bits from Indian Megaliths", *JMS*, vol. II, No. 4 (1961), pp. 170-72.
21. *IAR*, 1967-68, p. 34. The elaborate face-cover of copper comes from Khapa, District Nagpur.
22. Dhavalikar, M. K., "A Megalithic Plough-Coulter from Brahmagiri", *SPPMI*, p. 76.
23. Leshnik, *op. cit.*, p. 507.
24. *Ibid.*
25. Bose, N. K., *Tribal Life in India*, pp. 13-21.

CC-0. Agamnigam Digital Preservation Foundation,Chandigarh

the presence of as many villages, and immediately create a doubt in the validity of the 'nomadic' theory of Leshnik.

Chronology

When did all this happen? Fixing up a precise chronology for the Indian megaliths has been an uphill task with archaeologists. In the beginning, all sorts of fantastic guesses were made. Thus R. S. Panchamukhi took them to the Palaeolithic culture[26] and J. Duebreiul believed that the Malabar megaliths belonged to the Vedic Age[27]. The first serious attempt to date them was made by Mortimer Wheeler when he was digging the megaliths at Brahmagiri.[28] He took into account the evidence of coins reported from various megaliths dug earlier and then cross-cheked it with the evidence of pottery that he had collected from different habitational levels. He corroborated this evidence with certain circumstantial, literary and traditional evidences. Thus, he found that the *earliest datable* coin comes from a cist at Sulur, Coimbatore. It is a bronze coin identified by John Allan as Eran coin of the 3rd-2nd century B.C. Next came a Punch Marked coin in one of the megaliths at another site in the Coimbatore District. Fortunately, it was accompanied by a beautiful Roman silver coin of Augustus (23 B.C.—A.D. 14). Thus the coins helped in dating some of the Coimbatore megaliths : they belong to the 3rd century B.C.—Ist century A. D. bracket.

Recently, M. K. Dhavalikar has corroborated the evidence of the Roman coin by identifying a so-called 'chopper like iron object' from Brahmagiri as a Roman coulter, a plough-share. "The coulter came to India most probably in the latter half of Ist century B.C. when the trade with the Roman empire was brisk during the reign of Augustus."[29] The identification has, however, been challenged by Leshnik.[30]

The Russet Coated white painted pottery which came from the graves in Cochin, e.g., at Tiruvilvamala, was compared by Wheeler with a similar ware found at the habitation sites of Brahmagiri and Chandravalli. This ware was called by Wheeler as the Sātvāhana or Andhra Ware, discovered in the levels of the 1st-2nd century A.D. These levels overlapped in its lower layers with the megalithic wares. The Sātavāhana pottery was also found mixed with Rouletted Ware, a Roman ware of the Ist century A.D. On the eastern coast, in the excavations at Arikamedu,

---

26. Panchamukhi, R. S., "Dolmens and Cairns of Karnataka", *Jr. Bom. University*, vol. XIV, pt. iv (1946), pp. 10-28.
27. Jouveau-Dubreuil, G., *Vedic Antiquities*, pp. 25 ff,
28. Wheeler, R. E. M., "Brahmagiri and Chandravalli 1947", *Anct. Ind.* No. 4 (1947-48), p. 300.
29. Dhavalikar, M. K., "A Megalithic Plough Coulter from Brahmagiri", *SPPMI*, p. 67.
30. Leshnik, L. S., "A Unique Implement from a South Indian Megalithic Burial", *Man*, NS vol. 4 No. 4 (1969) pp. 641-3.

CC-0. Adarsh Jain Digital Preservation Foundation, Chandigarh

Pondichery, he discovered the pottery "of the distinctive 'Megalithic fabric' intermingled with typical 'Arikamedu Pottery' of the early or middle first century A.D.' The evidence of pottery, therefore, fixed the terminal date of the megaliths in the Ist century A.D.

At one stage in this connection, the literary evidence collected by Srinivasan[31] was also considered. It is from the Śangam literature of the 5th-8th century A.D., whose traditions, it is claimed by Srinivasan, go back to the 3rd century B.C. There are a number of passages in these anthologies which make mention of burials of the megalithic types. Wheeler also felt that the Asokan Edict of Brahmagiri was addressed to the people in the region who must have included the megalithic builders. The Edict is securely dated to the 3rd century B.C. He, therefore, thought, and still thinks,[32] that the south Indian megaliths are to be dated between the 3rd century B.C. and Ist century A.D.

N. R. Banerjee,[33] who excavated some very good megalithic sites in south India, however, feels that Wheeler's dating may be correct for the Brahmagiri megaliths but the same cannot be extended to cover all other megalithic sites of peninsular India. At Sengamedu, Tamil Nadu, the megalithic habitation deposit he encountered was as thick as three metres. The upper levels yielded the Rouletted ware of the 1st century A.D. According to him the lowest levels of the 3 metre deposit should be dated back to 700 B.C. The lower limit suggested by him (for the megaliths), however, rests on a few more considerations. At most of the sites, including Brahmagiri, the lower levels of the Hallur culture clearly overlaps with the uppermost levels of the Neolithic-Chalcolithic culture. According to him the uppermost levels of the Neolithic-Chalcolithic culture should be placed in 700 B.C. This, however, may not be correct. In fact, the overlap level at Hallur in Mysore has been dated by C-14 method to 1000 B.C.[34] (Here, layer 7, which is neolithic-chalcolithic, is dated to 1030±103 B.C. and layer 5 which is megalithic is dated to 955±103 B.C. Layer 6 contains the material of both the cultures and, therefore, represents the overlap phase. A mean date of 1000 B.C. could easily be visualized for it.) Similarly, on the present analysis the Neolithic-Chalcolithic culture at Brahmagiri seems to belong to the Jorwe group of cultures which is dated to 1300-1000 B.C. in the south, meaning the same thing : the overlap phase started in about 1000 B.C.

---

31. Srinivasan, K. R. "Megalithic burials and urnfields of south India in the light of Tamil literature and tradition", *Anct. Ind.*, No. 2 (1946), pp. 9-16
32. Wheeler, *Early India and Pakistan*, (Revised Edition, 1969).
33. Banerjee, N. R., "The Excavations at Sengamedu". *The March of India* (June, 1956), pp. 43-46, See also his article, "Megalithic Problem of India", *Studies in Prehistory*, Robert Bruce Foote Memorial volume, p. 172.
34. See the list of C-14 dates under Appendix I.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In this connection K. S. Ramachandran has made a very pertinent remark : the 1000 B C. date of Hallur stands only for the habitational deposits and there is hardly any valid ground on which it can be imposed on the megaliths.[35] To me, it is just possible that the burials are younger by a couple of centuries although Ramachandran places them in the 4th century B.C. In this context I would like to draw his attention to C-14 date of *circa* 550 B.C. for a particular level of Takalghat habitation sites which has yielded pottery, etc. identical to those found in its cemetery at Khapa. Obviously, the evidence is accumulating in favour of higher antiquity of the megaliths and the culture-complexes of their builders than those suggested by either Wheeler or Ramachandran. I place it between 900-800 B.C.

Some time back Subbarao[36] had shown that some of the megalithic pot-shapes, of Black-and-Red Ware, developed out of those found in the chalcolithic burials at Tekwada which contained a black-and-red ware pottery with graffiti marks. He visualized this development in the Tapti valley itself and quoted the example of pots with graffiti marks in a pit burial at Ranjala. About them Allchin writes : "The pottery from these burials is a compound of elements belonging to the Jorwe phase and elements of the earliest phase of the Iron Age."[37] He dates it to 1000 B.C. The overlap phase is, therefore, securely placed round about this date.

Banerjee, however, has one more reason to propose the date of 700 B.C. He has in his mind the cairn burials of Baluchistan as the source of Indian megaliths. He dated the cairns to 800 B.C, and allowed 100 years for them to travel to south India.[38] But, as said earlier, the dating of Hallur is almost decisive in favour of 1000 B.C. for Hallur culture. Obviously, the knowledge of iron metallurgy did not come to south India either exclusively or for the first time along with the megaliths. Still, there is no denying of the fact that the megalith builders exploited the local know-how to the best of their advantage and augmented the production of iron-implements to a very great extent ; in both the efforts they are likely to have employed their own knowledge of iron-metallurgy.

For the present it appears that the south Indian megaliths of the ancient period are broadly to be bracketed between 900 or 800 B.C. and 100 A.D. The lower limit has been fixed not only at Hallur where the Black-and-Red Ware with iron implements overlapped with the Neolithic-Chalcolithic deposit of an earlier period but also on one

35. Ramachandran, K. S , "Chronology of Indian Megaliths, Some Considerations", *Puratattva*, No. 3 (1969-70) pp. 107-109.
36. Subbarao, *op.cit.*, Fig. 30.
37. Allchin. B. & R., *Birth of Indian Civilization*, pp. 230-32.
38. Banerjee, N. R., *The Iron Age in India*, pp. 42-67.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

more ground : the coming of iron in India has itself been pushed back to 1000-900 B.C. independently, as the C-14 dates of the Swat Valley graves, Atranjikhera, Noh, etc., show (See Appendix I). It is more or less clear, therefore, that the megalithic wave did not directly impinge upon the Neolithic-Chalcolithic culture everywhere in the Deccan and south and, therefore, the end of the latter culture should be tied with the beginning of the pre-megalithic Hallur culture. By and large, the neolithic-chalcolithic culture started fading out in the Deccan between 1000-900 B.C.

TYPOLOGY AND DISTRIBUTION

Typologically, the megaliths of south India are extremely varied. At one stage Aiyappan classified them under as many as thirty five types.[39] It was supposed to be a marvellous achievement since, before the publication of his article in 1945, hundreds of European and local terms were used to describe them. This had created great confusion. Aiyappan's classification, however, also lacked clear definition applicable to the then known existing monuments. In 1944, therefore, a village to village survey of megaliths was planned under V. D. Krishnaswami who eventually systematized the typological classification and published it in 1946.[40] It included 14 basic types and a few sub-types to cover all the known varieties. It is now the standard classification adopted for the south Indian megaliths. Wheeler has, however, introduced a few modified terms which we have analysed below in order to understand the process which eventually determined the make up of a particular type. To us, that is much more important since that alone can give us an insight into the cultural dynamics of the period under review.

To quote an example, Wheeler has mentioned two types, viz. the Shallow-pit Burials and Deep-pit Burials.[41] The former is defined as a shallow pit entombing 'one or more pots or a terracotta legged sarcophagus.' A variant type entombed a big pyriform urn, as at Porkalam, Kerala. We, however, feel that the pit is secondary in all the examples quoted here. Since a pit was generally deep enough only to cover the urn or the sarcophagus, it need not be the basis for determining types. We have, therefore, called them Urn Burials and Sarcophagus Burials, and if they are surrounded by stone-circles we have called them 'Urn-circles' and 'Sarcophagus-circles' respectively. These are combined terms for monuments, combining two elements the urn-sarcophagus and cairn-circle.

The 'Deep-pit Burials' are really deep, upto 4 metres, but without any receptacle of bones and always surrounded by a stone-circle. We, therefore, feel that the term 'Pit-

39. Aiyappan, A., "The Megalithic Culture of South India", Presidential Address, *ISCA*, (1945) Anthropology and Archaeology Section.
40. Krishnaswami, *op. cit.*, pp. 35-45.
41. Wheeler, *Early India and Pakistan*, pp. 155-56.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Circle' is more appropriate than 'Deep-pit Burial' Moreover, at Jadganhalli even the 4 metre deep pits have been found containing sarcophagi. Depth alone, therefore, should not be made the criterion of any classification.

Similarly, we have neither favoured the term 'Cairn' nor 'Barrow' for any of the south Indian megaliths. There is always a cairn wherever there is a circle in south India. In cases where cairn-stones are there but not the circle-stones, very often, it has been observed that originally the circle-stones were there but had been inadvertently removed by ignorant people living in the nearby villages. 'Stone-circle' is a term that covers both-cairn as well as circle. 'Barrow' is an European term suitable for huge round or long tumuli found in England and other European countries. Such monuments simply do not exist in India. Pit or Sarcophagus burials covered with a shallw spread of stone-chips at Amrithamangalam, near Madras, are only an apology for an English barrow.

'Passage-Grave'is another such term which has been used for a particular group of megaliths in the Bijapur District. In plan, they do justify their name but they lack the imposing size and elaboration of European graves of that class. The Bijapur and Kaladgi passage graves never remind us of any of the English Passage-Graves. The so called 'passage-graves' in India are, however, of two types :

(i) Cists with three rectangular courts at the cardinal points and a passage on the south. The whole plan looks like a Greek Cross. These are found covered with cairn stones.

(ii) Circular cists with a passage on the south. The whole monument is found covered by a cairn with double circle or, a circle and a ractangle : all made of stones.[42]

With this classification in mind, we may now briefly enumerate the types of megaliths found in south India.

Dolmen : It is a free-standing table or box-like chamber made of huge rude stones, three or more in number.

Cist : It is a partially or completely underground box-like chamber made of stone-slabs.

Krishnaswami and Wheeler have not used these European terms: indiscriminately but proposed names which describe the Indian types faithfully. Krishnaswami has introduced the term Dolmenoid-cist for the former, and Wheeler has suggested Slabbed-cist for the latter.

42. *IAR*, 1964-65 and 1965-66. Unpublished. Also, A. Sundara, "Some New Types of megalithic Tombs near Terdal, Halingali, etc." *JMS*, vol. LVII nos. 1-4, (1967), pp. 1-7.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Dolmenoid-cist : It is a box-like chamber made of completely rude or partially dressed stones which may be fully or partially overground or underground. Krishnaswami divided them into three sub-types designated by symbols like D1, D2 and D3. They denote three different stages of the visibility of the monument ; Banerjee has rightly pointed out that it depends upon the different stages of 'degradation of the enclosing cairn.'[43] Thus, the major portion of D_1 is sunk underground rising only ½ a metre above ground : in D_2 the monument is fully overground ; in D_3 the entire chamber is underground.

Dolmenoid-cists when surrounded by a cairn-circle enclose an area, varying from 3 metres to 48 metres in diameter. The eastern orthostat of the cists may have a port-hole. or the eastern side may have a closed or open passage, replacing the port-hole. The best examples of this type of monument exist in the Chingleput District of Tamil Nadu, where they are found entombing one to five terracotta sarcophagisometimes zoomorphic in shape. Thus the one from Sankavaram District Cuddapha, resembles a ram, while another from Pallavaram, District Chingleput. resembles an elephant.

Slabbed cist : It is a general term for cists of different types made of stone slabs—granitic or lateritic. They are usually encircled by one or more stone-circles and covered with cairn stones, completely or partially. They usually measure 2 metres in length and equally in height.

In a large number of examples, the eastern upright carries a port-hole usually of a size ranging from 10 cm. to 50 cm. in diameter through which a man can insert his hand, may be to lower the bones and offerings. It is called a 'Port-hole Cist.' In most of the underground port-holed cists the portals are found covered by an additional external slab. Not only that, the portals are approached from the outside by a lined passage, also sealed from outside. In Brahmagiri, Mysore, the orthostats are found arranged in a over-sailing fashion forming the pattern of a swastika. Not only that, the cists are surrounded by one or more dry stone wallings of several courses.

Gordon Childe has very significantly observed that, "Just because the port-hole is not confined to any one narrow class of megalithic tomb, it seems to me a highly specialized trait suitable for defining a generalized "megalithic" culture, if any such, exists."[44]

---

43. Benerjee, N. R., *Iron Age in India*, p. 167.
44. Childe, *op. cit.*, p. 10. The port-holes in the Indian context is sometimes so small that they could hardly be functional, e.g., the cists in Pondichery. See, J. M. Casal. *Site Urbaine et Sites Funeraires des Environs de Pondichery*, pp. 30 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In Pudukottai, Tiruchenepalli, port-holed cists are 'approached through a slabbed ante-chamber as large as the main cist' and, therefore, called 'Transepted Cists', a term adopted from the plan of a Christian Church.

'According to local custom or the nature of the sub-soil, the cist may be built on the natural surface, or partially or completely below it. Thus in the Hyderabad region they are often deeply buried ; the Brahmagiri cists were half-buried ; whilst in a large megalithic cemetery in the jungle near Savandurg, twenty-two miles west-south-west of Bangalore, there are free-standing port-holed 'dolmens' intermingled with identical port-holed cists at all stages of submersion below the natural surface down to capstone level.'[45]

KERALA VARIETIES OF DOLMENS

There are certain varieties of dolmens confined to Kerala and primarily concentrated in Cochin. They are unique, with no exact parallel anywhere else in the world. Krishnaswami, therefore, has rightly proposed some local terms for them.

Topi-Kallu (Hat-stone) 'It consists of a circular laterite capstone in the form of a low and solid dome resting on four inwardly leaning and tapering stones about four feet high, standing so that their base-lines constitute a square with a diagonal approaching the diameter of the capstone. They are known to cover pit-burials.' They resemble mushrooms as well as umbrella, locally called 'Kudai'. It is because of the latter that they are alternatively called 'Kudai-Kals'.

Kundan-Kudai Kal (handleess-umbrella stone) ; It is a 'dome-shaped laterite block, similar to the cap of the umbrella-stones (Topi-kallus) but resting on the surface of the ground'. It is also supposed to cover a pit-burial.

The monument resembles the local handle-less umbrellas used by the cultivators in this monsoon ridden region of the country. Krishnaswami, however, called them 'Hood-Stones'[46]

Multiple hood-stones ; It is supposed to be an intermediary type between the above two. 'They consist of five to twelve inwardly leaning uprights of dressed laterite, some three feet in height. Whether capstone in fact completed the monument is not known. The structure presumably enclosed a burial-pit.'

KERALA ROCK-CUT CAVES

Kerala is also credited with another unique type of a grave in which the megalithic grave-goods have been found. These are underground pits and not structures.

---

45. Wheeler, *op. cit.*, p. 155.
46. Krishnaswami, *op. cit.*, p. 40.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

It has been possible to make these underground houses of the dead because the land is laterite and can be cut like cheese.

'The caves have been made by scooping out a square stepped pit in the rock, approached by rock-cut steps ; then by cutting one or more doorways in one or more sides of the pit, each doorway about 1½ feet high and just large enough to admit the workman ; and finally by opening up beyond the doorways a dome-shaped (rarely flat-roofed) cave or caves, normally circular but sometimes rectangular on plan and sometimes with a central rock-cut pillar of rectangular section, rising to the roof. Often there are rock-cut benches along the sides, and occasionally there is a central opening in the dome of the cave.'[47] (Fig 21) On the surface, the openings are found covered

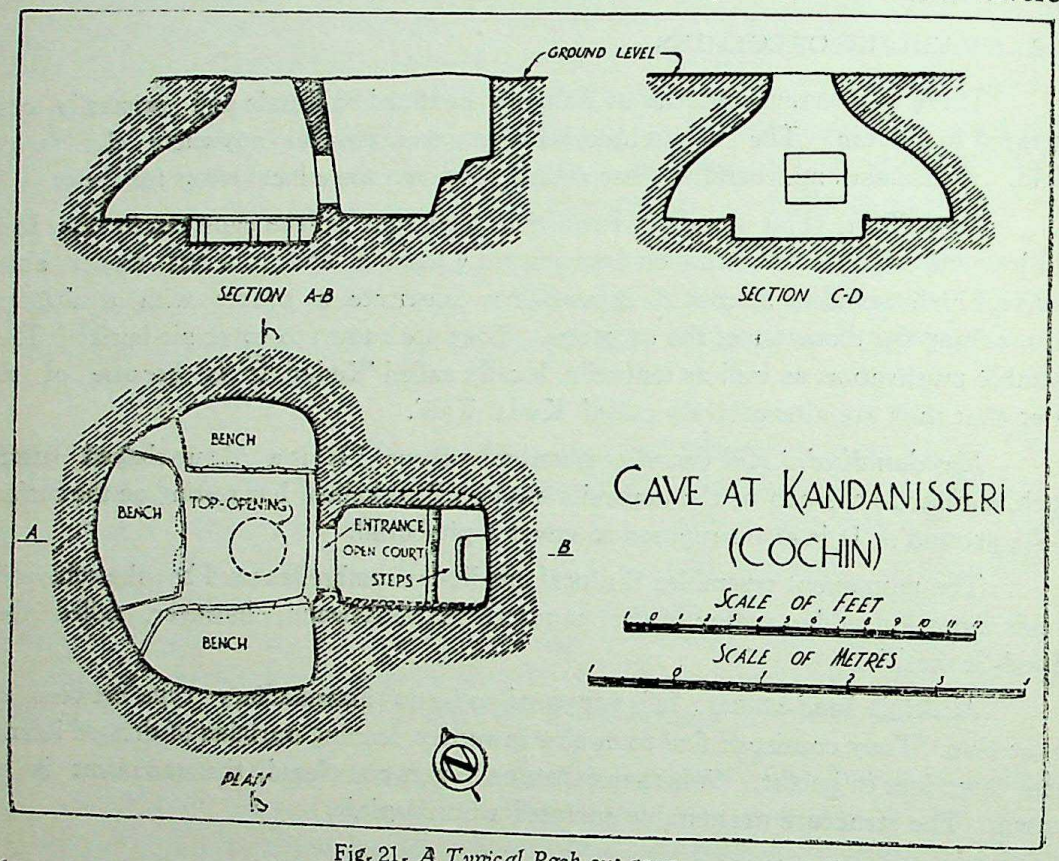


Fig. 21. *A Typical Rock-cut cave*

with a circular or square slab of stone. Babington has also mentioned the presence of 'symmetrically arranged stone-circles' on the surface of these caves. He has specially quoted the example of a cave at Bangla Motta Paramba.[48]

47. *Ibid.*
48. Babington, J., "Descriptions of the Pandoo Coolies in Malabar", *TISB*, vol. I1I (1823), pp. 324-30.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Aiyappan has mentioned the occurrence of sarcophagi and pyriform urns in the caves at Feroke, south Malabar. The bones and earthen pots, as well as iron objects have been reported from the rock-cut benches of these caves.[49] Y.D. Sharma has presented an integrated picture of these caves and has suggested the following developmental pattern for them : [50]

Multichambered Cave	Cave with a top-opening
	Cave with central pillar
	Cave without a central pillar
	Benched port-hole cist

These have been related variously to the Vedic Fire-houses, Śaivism and Buddhism, and even identified as store-rooms of the valuables used during the Muslim invasions.

Wheeler suggests that 'they may represent the huts, or even the umbrellas'. Talking about their relationship with the cists he further feels that they 'were in fact the quarried adaptations of the free-standing cists in the viable laterite of the Kerala lowlands.[51] The suggestion, however, may not be correct if it is remembered that in the European context it has repeatedly been suggested that the cists themselves are the simulated caves. It is significant to note that at several sites in Kerala, caves and cists are found together and it is difficult to say as to which was the copy and which was the original. At Porkalam, for example, in a two acre area, *Kundan-Kudai Kals*, Dolmenoid cists, Urn burials covered with granite slabs are found existing side by side with the caves.

MEMORIAL MEGALITHS

Added to the Sepulchral monuments listed above there are Menhirs—upright single stones, 1 to 3 metres in height. Sometimes they are reported to have been planted over a few funerar pots containing bones, although their recent excavations at Maski have yielded nothing. When several menhirs are arranged in rows of three or more, they form an *alignment*. When two or more alignments are arranged parallel to each other they form an *avenue*. All these monuments 'seem to suggest commemorative and perhaps magical prophpylectic functions for the stones.'[52]

---

49. Aiyappan, A., "Rock-Cut Cave-tomb of Feroke, South Malabar", *JMS*, vol. XXIII (1933), pp. 304-5.
50. Sharma, Y. D., "Rock-cut Caves of Cochin" *Anct. Ind.*, No. 12 (1956), p. 115.
51. Wheeler, *op. cit.*
52. Allchin, F. R., "The Stone Alignments of Southern Hyderabad", *Man*, vol. LVI, No. 150 (1956), p. 134.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

EXCAVATED SITES

By now, hundreds of megalithic sites in India have been excavated. Those dug before 1946, the year in which Brahmagiri was excavated by Wheeler, were by and large, dug unscientifically and therefore, to a large extent have been excluded from the list of primary sites whose data has been used. The important primary sites area as follows :

MYSORE

1. Brahmagiri 2. Jadganhalli 3. Maski 4. Halingali 5. Terdal 6. Hunur 7. Hallur.

TAMIL NADU

1. Sanur 2. Kunnattur 3. Amrithamangalam 4. Paiympalli.

ANDHRA PRADESH

1, Yelleshwaram 2. Nagarjunakonda 3. Kesarpalle.

MAHARASTRA

1. Junapani 2. Khapa.

MADHYA PRADESH

1. Dhanora.

Brahmagiri

The site is situated in the Chitaldurg District of Mysore. It is marked by the presence of a cemetery as well as a habitation site. Mortimer Wheeler[53] excavated the site in 1946.

HAIBITATIONAL AREA

Three trenches were dug here, They reveal that the Hallur culture (megalithic) impinged upon the Neolithic-Chalcolithic habitation and overlapped with the succeeding Andhra-Sātavāhana culture-complex. Except a few post-holes, suggesting only huts, no tangible evidence of houses has been found. Clearly, the site was only a village.

THE MEGALITHS

At Brahmagiri, the cemetery consists of more than 300 megaliths. They are of two types—the Cist-circles and the Pit-cirles.

Cist-Circle : These are the stone-circles bounding in each case a fully underground cist. The cists were made of granite slabs, 1.60 to 2.20 metres long, 2 metres longs, 2 metres broad and 5 to 10 cm. thick. They were always arranged in the Swastika

53. Wheeler, "Brahmagiri and Chandravalli 1947.....", *Anct. Ind.* No. 4 (1947), pp. 180-310.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

pattern, clockwise or anticlock-wise (Plate XXXIX), the device made them self-supporting. The floor was paved with one or more slabs and the top was closed with another slab, called capstone, sometimes 30 cm. thick and 5 metres across. The eastern orthostat is found having a port-hole (Fig. 22). In addition to these big cists, the cemetery

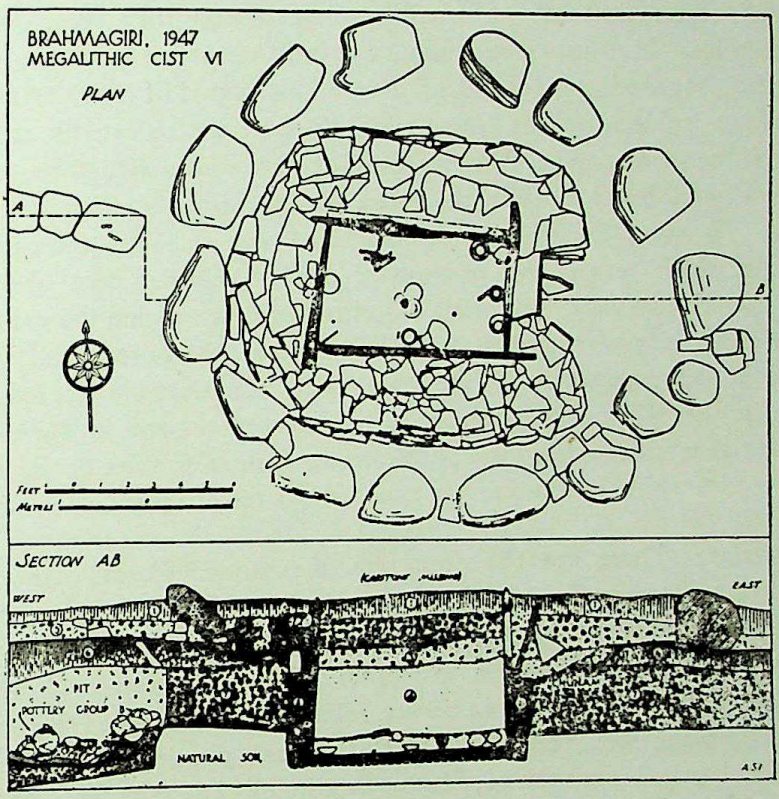


Fig. 22. *Brahmagiri : a typical Cist-circle*

consisted of a large number of small cists, erected almost on the surface. It is possible that the bigger ones belonged to the important families of the village while the smaller ones belonged to the masses. If the suggestion is correct, it reflects the social gradation existing in the population. The social gradation, however, does not mean social segregation because big and small cists are found existing side by side. The smaller ones were not excavated since, by and large, they were found disturbed. It is possible that they had entombed the relics of only the small children, although such a feature has not been noticed at any site excavated so far.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

A cist contained offering-pots anywhere between 6 and 62. The iron objects, stone beads and terracotta spindle whorls, etc. found with them were generally not more than half-a-dozen. The bones were of post-exposure nature. Since these megaliths were collective burials, the skulls and long bones often account for four to six persons.

Probably, the most significant observation made at Brahmagiri was the absence of the evidence of the repeated use of megaliths even though they were collective and they had port-holes. It at once distinguishes the Indian practice from the European in which a megalith was used again and again over a long period of time. And this raises a very interesting problem. If the Indian megaliths were not repeatedly used what was the function of the port-holes ? Wheeler felt that the whole structure, including the capstone, was erected first and then the bones and grave-goods were inserted through the port-hole. However, Banerjee has demonstrated that at Sanur the passage of the Dolmenoid-cist which served the purpose of a port-hole had been absolutely non-functional ; the objects were kept inside the cists from the top and the cap-stones were placed at the end. It appears that in the Indian context the portals and the passages were, by and large, non-functional and they were only slavishly copied from their counterparts in the West. By itself it is a strong argument in favour of Indian megaliths ebing genetically related to the Western megaliths in spite of the fact that so far we have not been able to demonstrate conclusively the complete chain of diffusion.

Pit-circles : These are the deep pits, surrounded by single or double stone-circles measuring between 7 and 10 metres in diameter. They were found in the centre of the cirles and sealed by cairn-stones. The pits were usually 2·66 to 4 metres in diameter and 2·20 to 2·66 metres in depth. When they were oval, which the pits sometimes were, the longer axis ran east-west. The pits were reached through a short shallow ramp from the east. (Fig. 23a) Out of a dozen pit-circles Wheeler excavated only four. He observed one very peculiar feature in all the examples. At the bottom, which was generally oblong or rectangular, four flat stone pieces were found one at each of the four corners. (Fig. 23b) In the beginning he felt that they carried the four legs of the bier and that these pits were macerating-pits.[54] It was, however, refuted by Banerjee[55] and his objections have now been upheld by Wheeler in his recent writings. However, since this feature has been found repeated at a few other sites, one has to try serioulsy to understand it. Even if these were not the macerating pits the stones

54. *Ibid.*, pp. 180 ff.

55. Banerjee, N. R., "The Megalithic problem of Chingleput in the Light of Recent Exploration", *Anct. Ind.*, No. 12 (1956), pp. 27-28.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

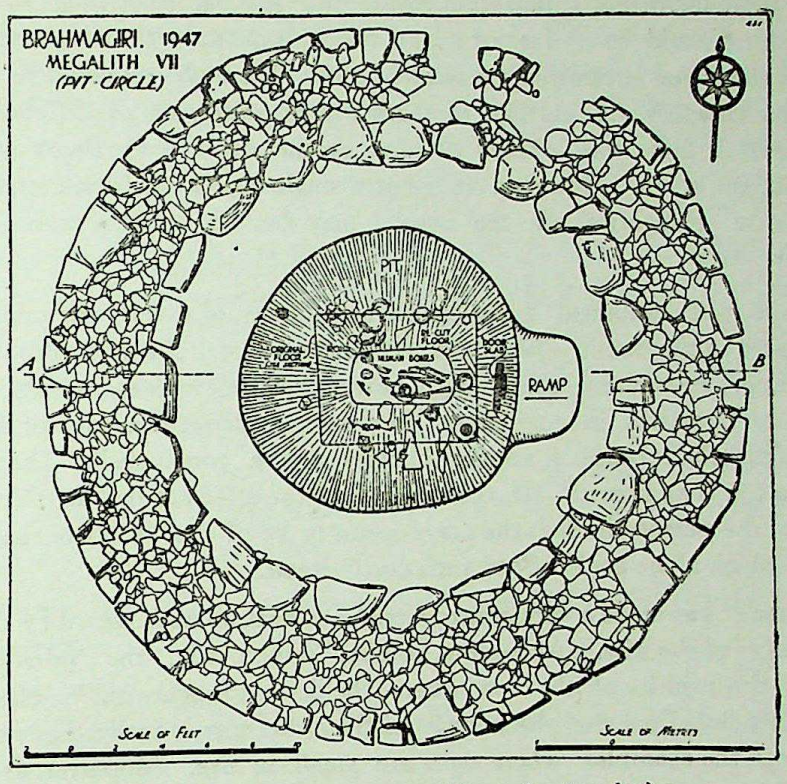


Fig. 23 (a) *Brahmagiri : a typical Pit-circle, (on plan)*

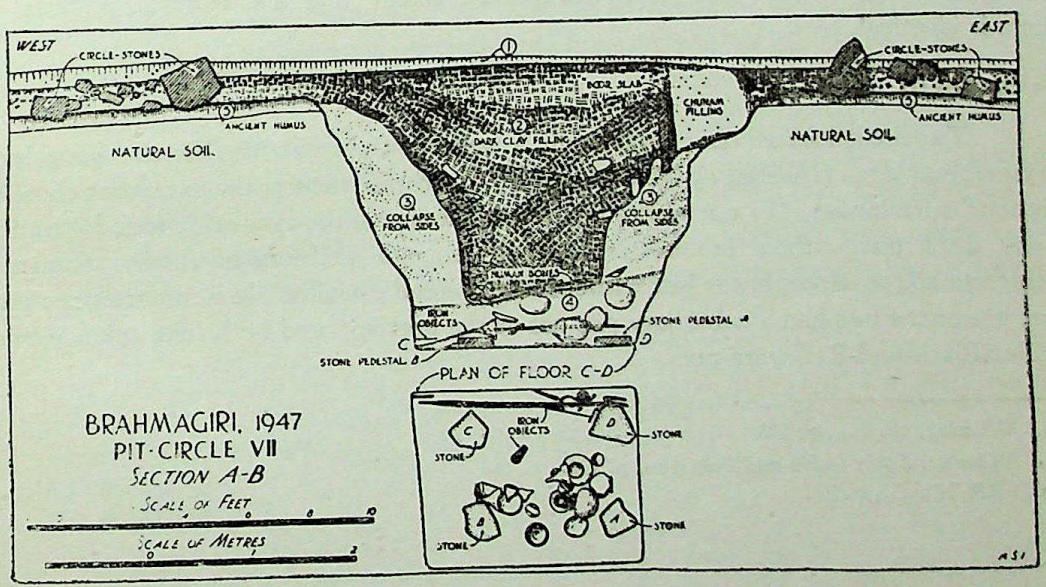


Fig. 23 (b) *Brahmagiri : a typical Pit-circle (in section)*

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

do suggest some important rituals connected with placing something with four legs. This 'something' could be a bier or a box, probably placed only temporarily. Or else, each one of the stones supported a separate object. These objects could be either of one and the same category, e.g., earthen pitchers full of water, or of different categories e.g., on one stone there was a vessel of corn, on the other stone there was a bowl of cooked food, and so on. However, since not a single object has been found *in situ*, it is difficult to be categorical on the issue ; may be, the objects were placed only temporarily.

These pits contained grave-goods and bones of exactly the same description as those found in the cists. The iron objects included both the agricultural implements and the weapons of war and chase, e.g., knives, sickles, wedges, chisels, arrowheads, lances up to 2 metres in length, etc. In one of the pits, the excavator discovered 33 gold and 2 carnelian beads, 4 copper bangles and a conch-shell. There were two skulls and a few long bones.[56] If the richness of the offerings had anything to do with the status of the persons buried, the grave seems to be of the family of the headman of the village, which alone could afford such costly items.

Wheeler has made a very controversial observation with regard to the externally closed passages of the pits. According to him, "structurally, the 'false-door' of the pits implies the priority of the cists where the door is functional."[57] However, it has already been pointed out that the portals of the cists may equally be non-functional particularly in the examples where these are small in size. Moreover, as far as India is concerned, the priority of the cists over the pits has as yet not been established stratigraphically or culturally ; they are found together and the cultural material in them is identical.

Jadganhalli

The site is located near Jadganhalli, a well known town in District Bangalore, Mysore, and was excavated by M. Sheshadri.[58] In the cemetery, the excavator chose to dig four cairn-circles. In the centre of these monuments, the excavator found 4 to 4·30 metre deep pits without ramps. Interestingly enough, each one of them contained a terracotta legged sarcophagus but without any skeletal remains. It is important to note that one of the pits had a subsidiary pits cut at the bottom, and both the pits yielded Hallur Black-and-Red ware pots.

---

56. Wheeler, *op. cit*,, p. 196.
57. Wheeler, *Early India and Pakistan*, p. 196.
58. *IAR*, 1956-57, p. 34.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Maski

It is a famous site for a version of the Minor Rock Edict of Aśoka. It is located in District Raichur, Mysore, and has been excavated on a large scale first in 1935-37[59] and then in 1954.[60] In the former excavations a number of cylindrical earthen ware sarcophagi were found intermixed with a number of extended pit burials. In 1954 excavations the picture of only some of the burial practices emerged clearly since the sarcophagi were not found. Thapar discovered four types of burial within the habitation or near it and a single type along the foot-hills. This is, of course, besides the menhirs which were memorials. The burial types detailed by Thapar are as follows :

Class B (i) : *Pit burial, single extended* : It is a deep Pit-burial, up to 2·50 metres in depth, containing the extended skeleton of a single individual. Sometimes the skeletons were found covered with stone slabs (Plate XL).

Class B (ii) : *Pit-burial, fractional and collective* : It is also a deep Pit-burial more than 3 metres in depth, with only one difference from B (i) that it contained the fractional bones of more than one person.

Class B (iii) : *Urn-burial, fractional* : It is an urn burial kept in a pit. The urn contained a few pots and fractional bones.

Class B (iv) : *Pit circle, single extended* : It is a pit-burial like B (i) with the only difference that on the surface, the pit was further demarcated by a cairn circle of the megalithic type of Class B (v).

Class B (v) : *Pit circle :* It is a monument often found in a typical megalithic cemetery Here, however, only two of them were found, out of which only one was excavated. It is a pit sealed by a cairn-circle. The pit contained fragmentary bones and iron implements.[61]

These burials yielded, as usual, the material equipment of the Hallur culture—Black-and-Red ware pots, iron tools and weapons, and copper objects. The habitational layers yielded terracotta gamesman, a marble, disc, etc., glass bangles, a gold bead, a horn bead, and an etched carnelian bead. The animals identified from the bones recovered both from the graves and the habitation are short-horned humpless variety of cattle and the sheep.[62]

---

59. *Annl. Rept. ADND* (1935-36 and 1936-37), pp. 19-31 and 14-16 respectively.
60. Thapar, B. K., "Maski 1954....." *Anct. Ind.*, No. 13 (1957), pp. 40 ff.
61. *Ibid.*, pp. 26-37.
62. *Ibid.*, pp. 13-14.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Halingali

The site is located near the town Halingali, District Bijapur, Mysore, and was excavated by A. Sundara.[63] (Plate XLI) Bijapur, Kaladgi, (Plates XLII and XLIII) Belgaum and Dharwar Districts in western Karnataka are known for the megaliths of elaborate plan of a Greek-Cross, or of the plan of a house with a long entrance or passage. Some of the latter ones have been constructed with sandstone slabs. They have multiple chambers with a primary axial corridor or alley and coursed dry-bond construction of the enclosure, which is often square. At Halingali both the types of monuments are found. Of the four megaliths Sundara dug, two are important.

Greek-Cross Cist (Meg. III) : It is a cist of the Greek-cross type. Along the major axes pillars of stone were erected—the longer axis was 6·50 metres while the shorter 4·75 metres. The orthostats of this cist were made of dry stone walling. The whole monument was surrounded by a walled square enclosure, each side measures 11 metres. The cist yielded a few fragments of human bones, iron objects and a large number of pots of the usual Black-and-Red and associated megalithic wares.

Pillared cairn (Meg. IV) : It is a circular cairn with three short pillars on the periphery—one each on the west, south and east. The monument is simple but it is important for the potteries it has yielded. They included both the Neolithic-chalcolithic grey ware sherds and the pots of the Hallur (Megalithic) red ware. Since the two wares were found in two different quadrants of the trench dug within the burial pit, it seems that they were placed simultaneously, but in two different groups.

The implication of this fact is far reaching. It clearly proves the overlap of the Neolithic-Chalcolithic and Hallur cultures. In the village, where the people of the Neolithic-Chalcolithic culture lived, there came the megalith builders of the Hallur culture. It appears that they lived together in peace and harmony. Slowly, the Neolithic-Chalcolithic people adopted the way of life of the new comers and the megalith in question belonged to this transitional or the overlap phase. Although it was erected by the newcomers, the older population, which still retained its pottery tradition, paid homage to the dead by placing the offering-pots from its own kilns.

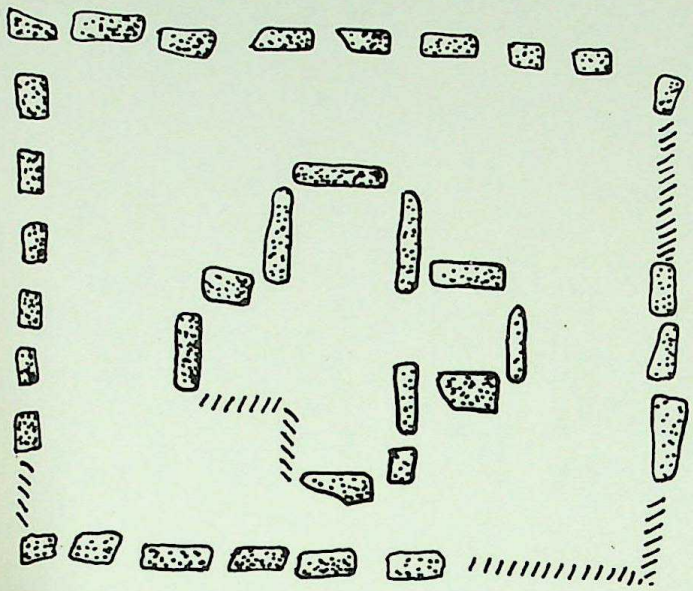
Terdal

This site is also located about 3 km. from the village Terdal in District Bijapur. Here, two megaliths were excavated by A. Sundara, one is that of the passage-grave type and the other is of the Greek-cross type.[64]

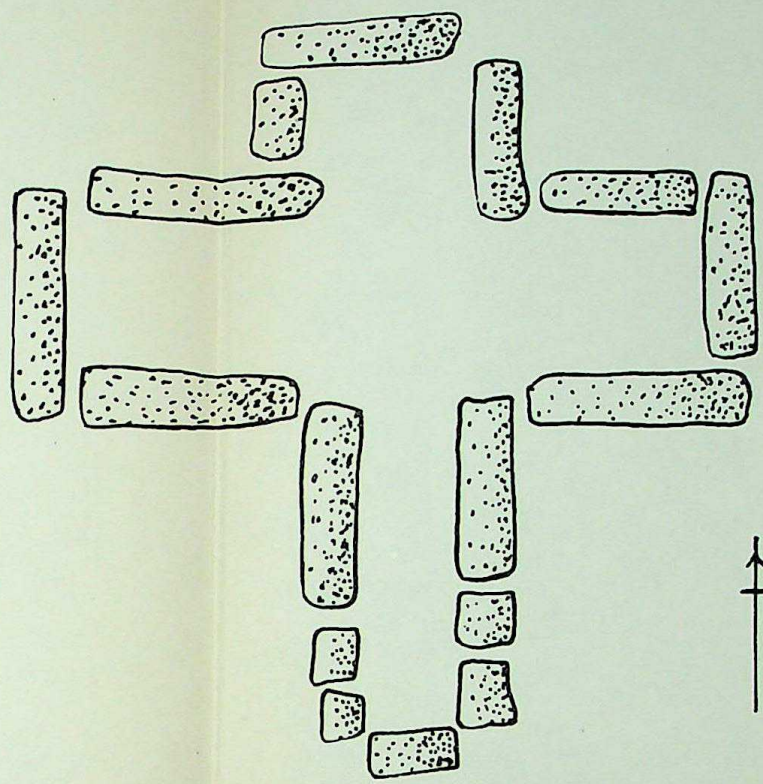
63. *IAR*, 1965-66, Unpublished.
64. *Ibid.* Also, Sundara, *op. cit.*, pp. 1-10.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

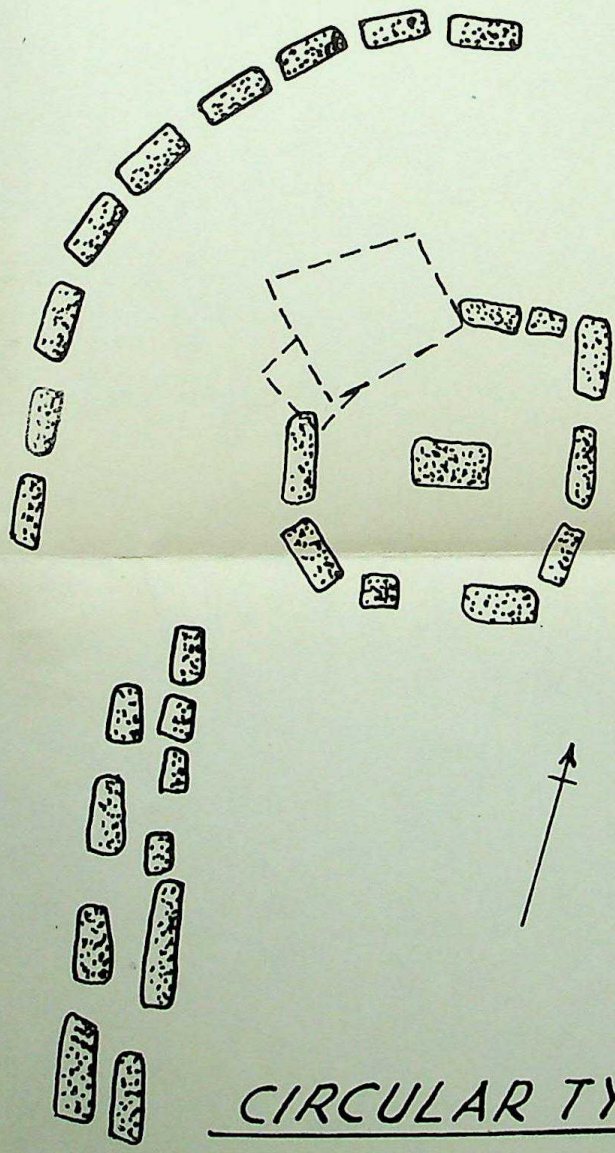
PASSAGES GRAVES



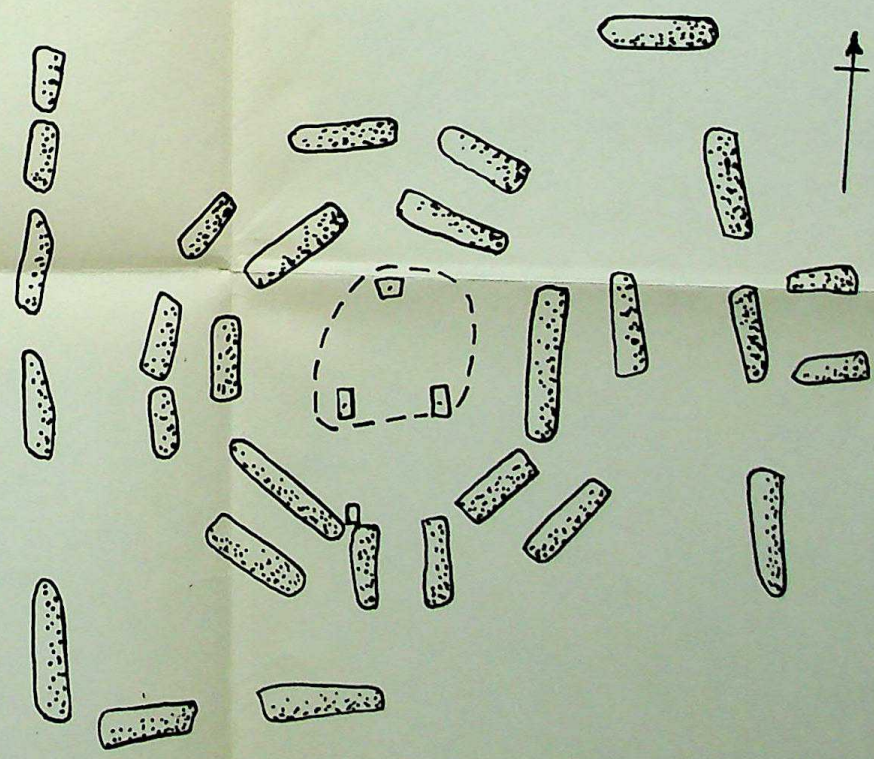
GREEK CROSS TYPE



LATIN CROSS TYPE



CIRCULAR TYPE



CIRCULAR TYPE

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Passage Grave : (*Meg.I*) It is a circular cist with a passage from the south. Three pillars found inside the cist supported a capstone. The whole grave has been found surrounded by a stone-circle encased in a stone-rectangle. The cairn-stones covered the monument. Inside the cist a few Black-and-Red Ware sherds as well as a few red ware pieces have been found. The skeletal remains, represented by a few bones, were found contained in a pot.

Greek-Cross Grave (*Meg. II*) : It is a cist of the Greek-cross type. It was found concealed under a rectangular cairn of stones. There were neither the stone-pillars nor a capstone. The grave-goods included a large number of pot-sherds of the red ware as well as the Black-and-Red Ware.

In the Bijapur District some of the cairn-circles found at Madanhalli, Markanal Salvadgi and Talikot belonged to these Greek-cross and Passage-grave categories. One of them, found exposed, had an external passage about 1½ metre long. It led to the eastern orthostat of the cist wich measured 3·5 x 3·2 metres.

Hunur

The site of Hunur is located on the left bank of the Ghataprabha, a tributary of the Krishna, in District Belgaum, Mysore State. It is now known for a remarkable multiple passage-grave with three cists and a number of Urn-burials. The entire group was covered with a huge cairn of stones. Cist 1, 2·5 metres square chamber, was surrounded by a circle of dressed stones, laid in six courses, and further enclosed by a rectangular platform (15 x 15·6 metres) of rubble lined with stone slabs. It was approached by a passage, the walls of which were made of upright stone slabs and the floor of rammed rubble. Measuring 40 to 50 cm. in width, the passage was blocked at the southern end by an upright slab.'[65] Cist 2 was of the same features, except that it was rectangular on plan (3·25 x 1·30 metres). Cist 3, located on the southern end of the cairn, measures 3·55×2·95 metres. Below one of the orthostats was found a 30 cm. deep pit containing some ash, a few bones, and a limited number of potsherds.

Outside the stone-circles, but on the rubble platforms, S. R. Rao, the excavator, found a large number of pot-burials. In this connection he observes : the fact that the rubble tumulus has been disturbed at places where the burial-pots are found, indicates that the megalith was in continuous use for a pretty long time. One of the pot-burials yielded a copper bell.

It is significant to note that no iron object was found in any grave and the Black-and-Red ware sherds could indicate the presence of only one complete pot, viz.

65. Rao, S. R., *IAR*, 1968-69, Unpublished.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

bowl; the majority of the pots, wide mouthed jars for child burials, were of coarse red ware.

Hallur

The habitation site of Hallur in Dist. Dharwar, has been excavated by M.S. Nagarajarao. While period I of the site represents the Neolithic-Chalcolithic phase of Indian culture, period II represents the Hallur (i. e., Megalithic) Culture. It includes typical Black-and-Red ware, all black, and all red wares; the wares of the first two categories are having a number of pots with white painted designs in the panels of short parallel vertical or slanting lines, reminiscent of the Banas Chalcolithic pottery as also the Perumbair megalithic pottery. Besides these typical megalithic potteries, including bowls, funnel shaped pots, dishes, lids, etc., the assemblage consisted of iron arrowheads, spearheads and knife blades.

The levels of this period has not yielded any evidence of structures. Since there is the evidence of much burning, the structures, it seems, were badly destroyed in fire.

Sanur

The site is located in District Chingleput, Tamil Nadu. It is a cemetery of over 300 graves, out of which only five were dug by N. R. Banerjee. All of them, except one Pit-circle, were Dolmenoid-cists.

Pit-circle : The only example of pit-circle, designated as Meg. 5, has revealed a stone-circle of crude boulders, protecting a heap of cairn-stones rising about a metre high. The circle measures 16 metres in diameter. In the Centre was discovered a 2·25 metre deep oblong pit; 5·66 metre long and 3 metre broad, the longer axis being east-west. It is not approached by any ramp, in contrast to the Brahmagiri examples. The pit yielded more than 70 earthen pots and a good number of iron objects like arrowheads, spearheads, wedges, daggers, chisels and horse-bits. They were found placed at different levels of the filling which shows that the death rituals were quite elaborate. Significantly, the grave also had the bones of a wolf or hyena, humped cattle, sheep, goat and fowl, i.e., both of the wild and the domesticated animals. The megalith is known for a number of long shell beads, 3 decorated conches and 5 beautifully decorated holed discs. The decorations of geometrical petterns on the conches were incised.[67]

Dolmenoid-cists : These are the chambers ranging in measurement from 1·90 to 3 metres in length and 2 metres in width. Generally, seven crude boulders formed the moument. The tops were covered with massive capstones. In a typical example the

66. Nagarajarao, M. S., *Protohistoric Cultures of the Tungabhadra River*, pp. 13 and 25.
67. Banerjee, N. R., *et al*, "Sanur 1950 and 1952", *Anct. Ind.* No. 15 (1959), pp. 12 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

cist had a 60 to 70 cm. broad and blocked passage on the eastern side. Two of the four cists dug at the site were found entombing one sarcophagus each ; the third had three sarcophagi and the last had five sarcophagi. Each grave was surrounded by a stone-circle measuring 5'5 to 13'5 metres in diameter. These graves have yielded only earthen pots, iron implements and objects of stone and shell; human bones have been found in a very few examples. Banerjee[68] has worked out the sequence of their construction as follows :

(i) Construction of the chamber,
(ii) Furnishing with grave goods, bones, etc.,
(iii) Filling it with clay,
(iv) Erecting the cairn, and
(v) Carrying of the capstone over a ramp and its hoisting on the orthostatic boulders.

Meg. I is marked by five legged terracotta sarcophagi, all oriented east-west, except one which was kept in north-south orientation. The tomb yielded 50 pots, a few iron objects and some human bones, including two teeth. Meg. 2 had three sarcophagi, two oriented east-west and one north-east to south-west. It yielded 25 pots, two terracotta beads, one animal terracotta figurine, and iron objects like tanged knife, hook, bar, arrowhead, sickle and horse-bits. The earthen pots included some legged pots, similar to those found in the megaliths of Kerala and southern Tamil Nadu. Megs. 1 and 2 also yielded a few stone quern-and-pestles. Meg. 3 contained only one east-west kept sarcophagus. The grave, outside the sarcophagus, had 45 pots, two etched carnelian beads and a fragment of an iron object. Meg. 4 also contained only a few iron objects and earthen pots.

Paiyampalli

The site, situated in the North Arcot District of Tamil Nadu, has recently been excavated by S. R. Rao.[69] Its significance lies not so much in the material collected from the graves as in the evidence about the pattern of settlement as revealed in the habitational area.

HABITATIONAL AREA

This is probably the only site dug so far which has yielded three successive floors with regular post-holes arranged in circular and oblong manner, clearly indicating circular and oblong huts. The circular huts ranged in diameter from 1'5 to 3 metres

68. *Ibid.*, p. 8.
69. *IAR*, 1064-65 (Unpublished) and 1967-68, p. 28-30.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

bowl; the majority of the pots, wide mouthed jars for child burials, were of coarse red ware.

Hallur

The habitation site of Hallur in Dist. Dharwar, has been excavated by M.S. Nagarajarao. While period I of the site represents the Neolithic-Chalcolithic phase of Indian culture, period II represents the Hallur (i. e., Megalithic) Culture. It includes typical Black-and-Red ware, all black, and all red wares; the wares of the first two categories are having a number of pots with white painted designs in the panels of short parallel vertical or slanting lines, reminiscent of the Banas Chalcolithic pottery as also the Perumbair megalithic pottery. Besides these typical megalithic potteries, including bowls, funnel shaped pots, dishes, lids, etc., the assemblage consisted of iron arrowheads, spearheads and knife blades.

The levels of this period has not yielded any evidence of structures. Since there is the evidence of much burning, the structures, it seems, were badly destroyed in fire.

Sanur

The site is located in District Chingleput, Tamil Nadu. It is a cemetery of over 300 graves, out of which only five were dug by N. R. Banerjee. All of them, except one Pit-circle, were Dolmenoid-cists.

Pit-circle : The only example of pit-circle, designated as Meg. 5, has revealed a stone-circle of crude boulders, protecting a heap of cairn-stones rising about a metre high. The circle measures 16 metres in diameter. In the Centre was discovered a 2·25 metre deep oblong pit; 5·66 metre long and 3 metre broad, the longer axis being east-west. It is not approached by any ramp, in contrast to the Brahmagiri examples. The pit yielded more than 70 earthen pots and a good number of iron objects like arrowheads, spearheads, wedges, daggers, chisels and horse-bits. They were found placed at different levels of the filling which shows that the death rituals were quite elaborate. Significantly, the grave also had the bones of a wolf or hyena, humped cattle, sheep, goat and fowl, i.e., both of the wild and the domesticated animals. The megalith is known for a number of long shell beads, 3 decorated conches and 5 beautifully decorated holed discs. The decorations of geometrical petterns on the conches were incised.[67]

Dolmenoid-cists : These are the chambers ranging in measurement from 1·90 to 3 metres in length and 2 metres in width. Generally, seven crude boulders formed the moument. The tops were covered with massive capstones. In a typical example the

66. Nagarajarao, M. S., *Protohistoric Cultures of the Tungabhadra River*, pp. 13 and 25.
67. Banerjee, N. R., *et al*, "Sanur 1950 and 1952", *Anct. Ind.* No. 15 (1959), pp. 12 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

cist had a 60 to 70 cm. broad and blocked passage on the eastern side. Two of the four cists dug at the site were found entombing one sarcophagus each ; the third had three sarcophagi and the last had five sarcophagi. Each grave was surrounded by a stone-circle measuring 5'5 to 13'5 metres in diameter. These graves have yielded only earthen pots, iron implements and objects of stone and shell; human bones have been found in a very few examples. Banerjee[68] has worked out the sequence of their construction as follows :

(i) Construction of the chamber,
(ii) Furnishing with grave goods, bones, etc.,
(iii) Filling it with clay,
(iv) Erecting the cairn, and
(v) Carrying of the capstone over a ramp and its hoisting on the orthostatic boulders.

Meg. I is marked by five legged terracotta sarcophagi, all oriented east-west, except one which was kept in north-south orientation. The tomb yielded 50 pots, a few iron objects and some human bones, including two teeth. Meg. 2 had three sarcophagi, two oriented east-west and one north-east to south-west. It yielded 25 pots, two terracotta beads, one animal terracotta figurine, and iron objects like tanged knife, hook, bar, arrowhead, sickle and horse-bits. The earthen pots included some legged pots, similar to those found in the megaliths of Kerala and southern Tamil Nadu. Megs. 1 and 2 also yielded a few stone quern-and-pestles. Meg. 3 contained only one east-west kept sarcophagus. The grave, outside the sarcophagus, had 45 pots, two etched carnelian beads and a fragment of an iron object. Meg. 4 also contained only a few iron objects and earthen pots.

Paiyampalli

The site, situated in the North Arcot District of Tamil Nadu, has recently been excavated by S. R. Rao.[69] Its significance lies not so much in the material collected from the graves as in the evidence about the pattern of settlement as revealed in the habitational area.

HABITATIONAL AREA

This is probably the only site dug so far which has yielded three successive floors with regular post-holes arranged in circular and oblong manner, clearly indicating circular and oblong huts. The circular huts ranged in diameter from 1'5 to 3 metres

68. *Ibid.*, p. 8.
69. *IAR*, 1064-65 (Unpublished) and 1967-68, p. 28-30.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

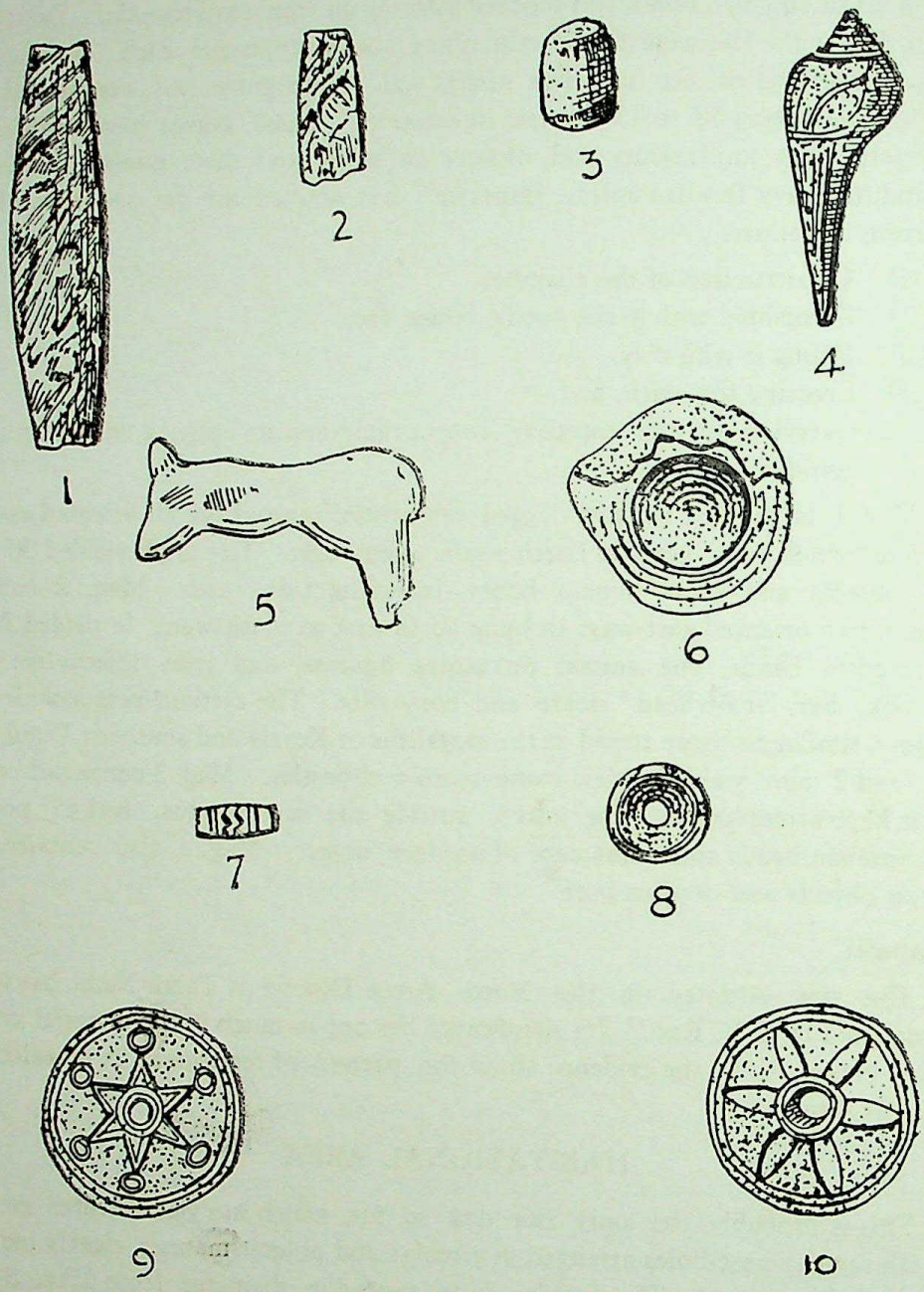


Fig. 24. *Shell, terracotta and stone objects from Sanur*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

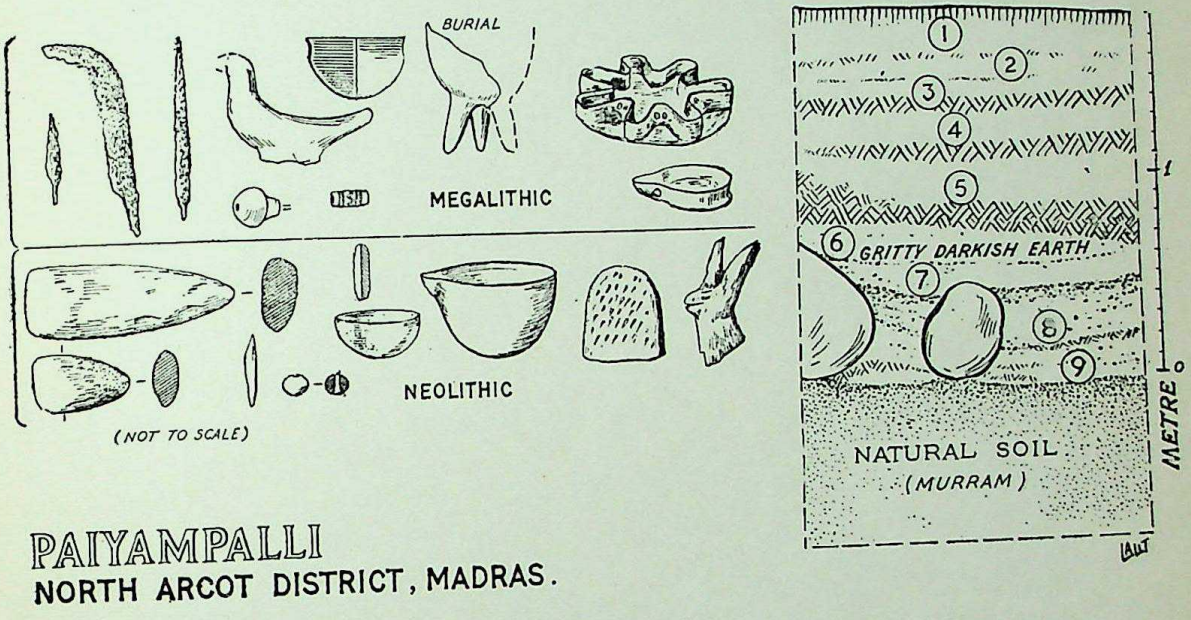


Fig. 25, *Material remains of the Megalithic and Neolithic periods from a trench in the habitational area at Paiyampalli*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and the longer axis of the oblong huts varied between 1·7 and 4 metres. Although most of the houses were of single huts, at least in one example the house was double-roomed. It is significant to note that the floors of these huts were paved with stone-chips covered with murram and plastered with lime. That these huts were provided with movable doors is also evidenced from a perforated stone base found *in situ*. Rao has mentioned a very interesting discovery of some conical objects in terracotta arranged in groups of three, with a single exception in stone, having perhaps some ritualistic significance.[70] The pottery included not only all the types found in the graves but also a 'comparatively thin and coarse red ware painted in chocolate or light brown' which was 'distinct from the orange colour painting found on the burial pottery'. They 'display an elementary attempt of the megalithic potter to decorate with pigments without any proper scheme' although in a few cases human and plant figures have been drawn symbolically.[71] (Fig. 25) The evidence is interesting since it clearly shows that even though there may be homogeneity in the burial practices, and to a great extent in the material equipment from the graves, yet in the everyday life regional potteries also played a very important part.

The site is equally important for the enormous quantity of iron slag and ore found all over the mound since it proves that the people smelted iron and made tools locally. The tools found in the habitation layers include sickles, spears, chisels, nails, etc. A Terracotta lamp with eight lips for wicks is an interesting find since it was definitely a ritualistic object.

THE CEMETERY

The cemetery consists of scores of cairn-circles of which only three were excavated. They were all pit-circles—circles ranging in diameter between 3 and 10 metres. Meg. I concealed a pit which was lined with stones. A thin layer of greyish earth with lime speckles floored the bed-rock. Inside the pit, disarticulated bones of 2 persons were found. One of the dead was a 50 years old man. The grave-goods consisted of iron implements, a terracotta bead and earthen pots, including a three legged vessel. Meg. II was found disturbed. Meg. III had a stone-lined pit containing a terracotta sarcophagus with 24 legs. It was found entombing disarticulated human bones and 18 iron arrowheads. Graffiti marks were found on pots both from the graves and the habitation.[72]

---

70. *IAR*, 1967-68, p. 28.
71. *Ibid.*
72. *Ibid.*, p. 29-30.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Kunnattur

The site is about 24 km. south of Madras in District Chingleput, Tamil Nadu. It is both a cemetery and a habitation site. The site was excavated by Ballabha Saran along with the author.[73]

HABITATIONAL AREA

It is a flat land below the hill over which the cemetery is situated. When excavated, it was found containing the habitational debris of only two periods—the lower one was of the Hallur culture and the upper one of the Andhra-Satavahana complex. The cultural deposit of the Hallur period, hardly 60 cm. in thickness, yielded only beads of quartz, glass and terracotta and some full pots of Black-and-Red Ware kept a in pit, cut in the bed-rock. The site during the Hallur period seems to be only a small village.

THE CEMETERY

It contained about a hundred graves, including dolmens, slabbed cists, pit-circles, sarcophagus-circles and urn-burials. Only five of these were dug. (Fig 25).

THE GRAVES

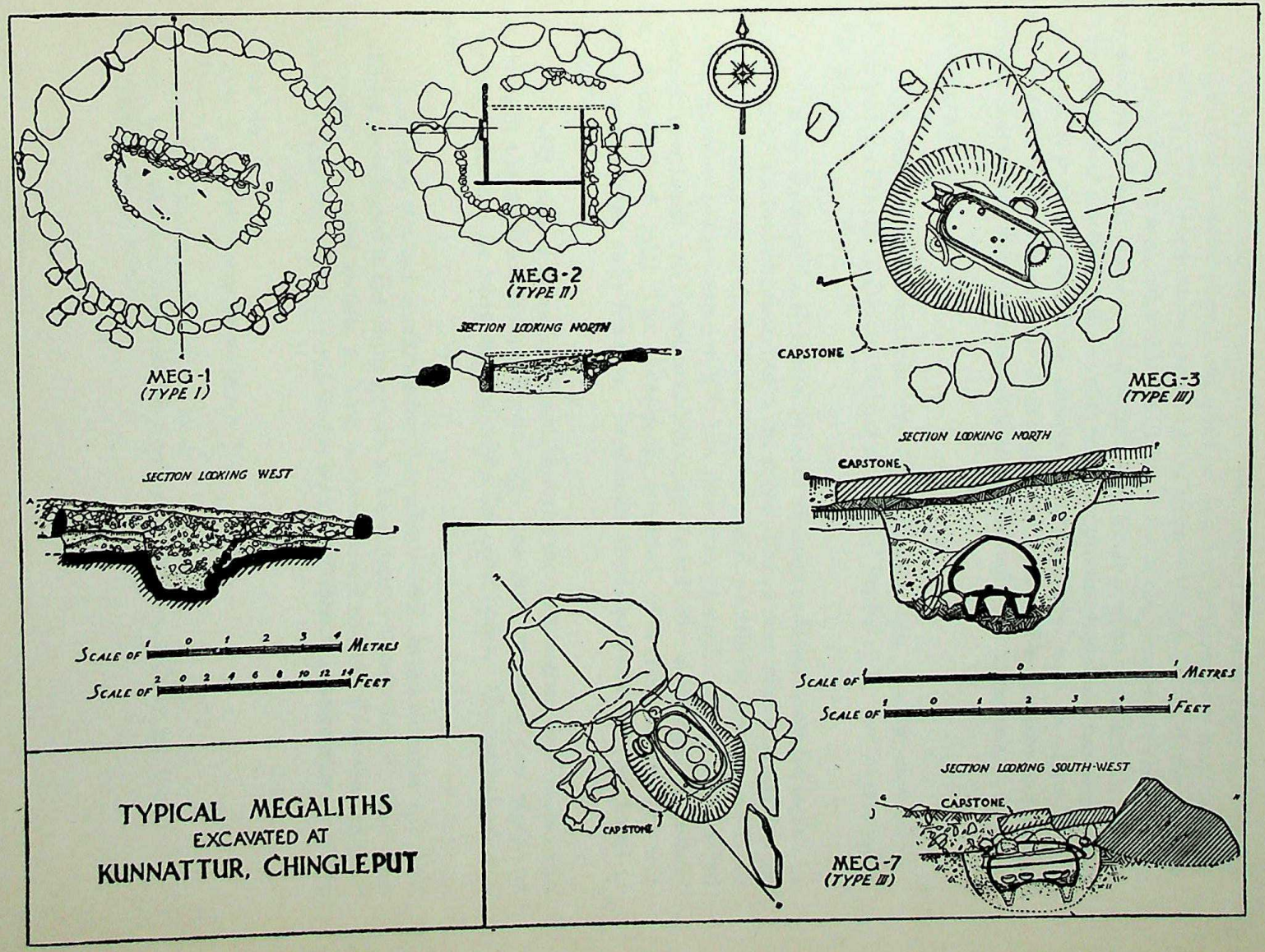
Port-holed Cist : A port-holed slabbed cist, Meg. 2, was found already disturbed by vandals. It has, however, still yielded an iron sword, a terracotta spindle-whorl and a copper bell, of a type generally found tied round the neck of the cattle.

Sarcophagus Burial : The sarcophagus pit burial, Meg. 3, was found completely intact, and sealed by a fairly big stone slab. Round the capstone a partially preserved circle of small stones was also found. The grave 2 yielded coil bracelets of iron, a tooth of a young man and a small piece of a long bone. Outside the sarcophagus, but within the pit, were found 13 earthen pots.

Pit-Circles : Interestingly enough, one of the sides of the 2·66 metre deep pit of Meg. 1 was lined with a single course of stones to save it from possible collapse. The pit had a long ramp on the eastern side. The grave yielded 26 pots and 7 iron weapons of war and chase. There were no bones. Meg. 4 was also a pit-circle with the pit lined with stones. It yielded flat iron celts spearheads, knives, nails and two pairs of horse-bits as well as a number of earthen pots. There were no bones.

Cairn circle : Meg. 5 was a cairn-circle with four sarcophagi in four different pits. The circle was 10·66 metres in diameter. The central pit entombed a sarcophagus about 2 metres long and 80 cm. broad with 21 legs arranged in three rows. It did not contain any bone but yielded a few pots and a 1·43 metres long iron spike. Outside the coffin, but within the pit, were found flat celts, knives, daggers and spearheads. If the

73. *IAR*, 1956-57, p. 23 ; and 1957-58, p. 37.



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

size of the sarcophagus and the nature of iron implements have anything to do with the status of the person buried, then it can safely be said that he might have been the chief of the village. This interpretation further gains ground when it is found that 'outside the pit, towards the south, but within the limits of the circle, were intered three smaller legged sarcophagi kept in east-west direction, each within a separate shallow pit.'[74] None of them contained any bone. In one of them a few pot-sherds and an iron arrowhead were found. It is possible that these objects belonged to the close associates of the chief. Since all the sarcophagi were devoid of bones it is possible that they had died in a war or chase, away from the village, and these were only their memorials.

Yelleswaram

The site, now submerged under the Nagarjunasagar dam, was situated on the left bank of the Krishna in District Nalgonda, Andhra Pradesh. It was excavated by A.W. Khan.

The site is known for elaborate plans of the cists and twin extended burials, as well as for the north-south orientation of the graves. Thus, a port-holed (the portal in the northern orthostat) cist of the Swastika type was found containing another small cist in close proximity to the western wall.[75] In a pit-circle, covered with two huge slabbed capstones, were found 'two complete skeletons, one on the other in an extended position' over a cushion of ash. The grave-goods consisted of a 1·68 metre long iron lance, a tanged dagger and a few pots. In addition, it yielded some selected bones of a horse.[76]

In still another example of a slabbed cist the inner portion was divided into two parts by a stone slab kept vertically on edge ; one part contained two skulls and some long bones, and the other, one skull and a few other bones. The cist was oriented north-south.

Long back Rea had mentioned complete inhumations ; in one example the dead was buried cross-legged in the sitting posture at Parambair in Tamil Nadu.[77] Hunt had also reported extended burials at least in two examples of the Hyderabad cairns.[78] Recently, Thapar has also discovered similar burials at Maski,[79] and Banerjee has found

74. *IAR*, 1957-58, p. 73.
75. Khan, A. W., *Yelleswaram Excavations*, p. 5.
76. *Ibid.*, p. 8.
77. Rea, A., *Annl. Rept. ASI*, (1908-9), pp. 93-94.
78. Hunt, E. H., "Hyderabad Cairns and their Significance", *JRAI*, vol. 24 (1929), pp. 140-56.
79. Thapar, *op. cit.*, pp. 26-35.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

them at Nagarjunakonda.[80] But it may be significant to note that in all these examples they were found in pit-burials and not in cist-burials. In cists, complete inhumation burials are extremely rare. At Sulur and Hyderabad they have been reported in cists although in both the places the evidence recorded is very sketchy.[81] Therefore, it is possible that they represent an older tradition preserved in certain pockets even when the people had adopted the megaliths.

Nagarjunakonda

The site, now submerged in the Nagarjunasagar Dam, was situated opposite Yelleswaram, on the right bank of the Krishna in District Guntur, Andhra Pradesh. The megaliths were largely excavated by N. R. Banerjee.[82] On the whole, 16 graves were dug of which 14 were pit-circles and 2 slabbed-cists without port-holes. (Fig. 27) Some of the graves were oriented north-south as they were at Yelleswaram. In three examples extended burials of adults were found in pit-circles ; two of them were oriented north-south and one east-west. As at Maski, the bottom of several pits were found levelled with 8 to 15 cm. thick cushion of ash or lime or both. The human bones and offerings were kept over this bed as well as on different levels of the pits. Animal bones and complete skeletons of animals of domesticated variety have also been found in three of these pits. The burials were generally collective, containing the skulls and long bones of 2 to 6 persons in a lot. It is also significant to note that in some examples of post-exposure burials, the bones were arranged in a fashion as if the body was laid to rest as a complete inhumation. It may be recalled that in the neolithic cemetery nearby the same custom was prevalent in a much earlier context. Not only that, in two of these graves the skeletons of a male and a female were found lying side by side ; this is another example of a practice followed earlier by the neolithic people of the region. Similarly, in the neolithic cemetery in the valley, at least in one example, a complete inhumation of an adult male was found in a pit sealed by cairn stones. As mentioned above, it was a custom found repeated in the megalithic cemetery.

Pit-circles : Meg. XIV has been found containing the extended burial of an adult female. The body was oriented north-south. The grave-goods discovered in the pit have been very rich. It consisted of spiral gold ear-rings found lying near the ear-lobe portions of the skull ; 35 gold beads and 18 silver spacing beads have been

80. *IAR*, 1958-59, p. 6 and 1959-60, p. 9.

81. Beck, H.C., "Notes on Sundry Asiatic Beads" '*Man*, vol. XXX (1930), p. 172. See also E. H. Hunt, "Megalithic Burials in South India", *JRAS*, (1933), p. 508.

82. *IAR*, 1957-58 to 1959-60. See also, H. V. Sarkar, "Megalithic Monuments of the Lower Krishna Basin"' *SPPPMI*, pp. 14-16. One of the extremely important cists with at least six skulls was excavated by K. V. Sounder Rajan.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

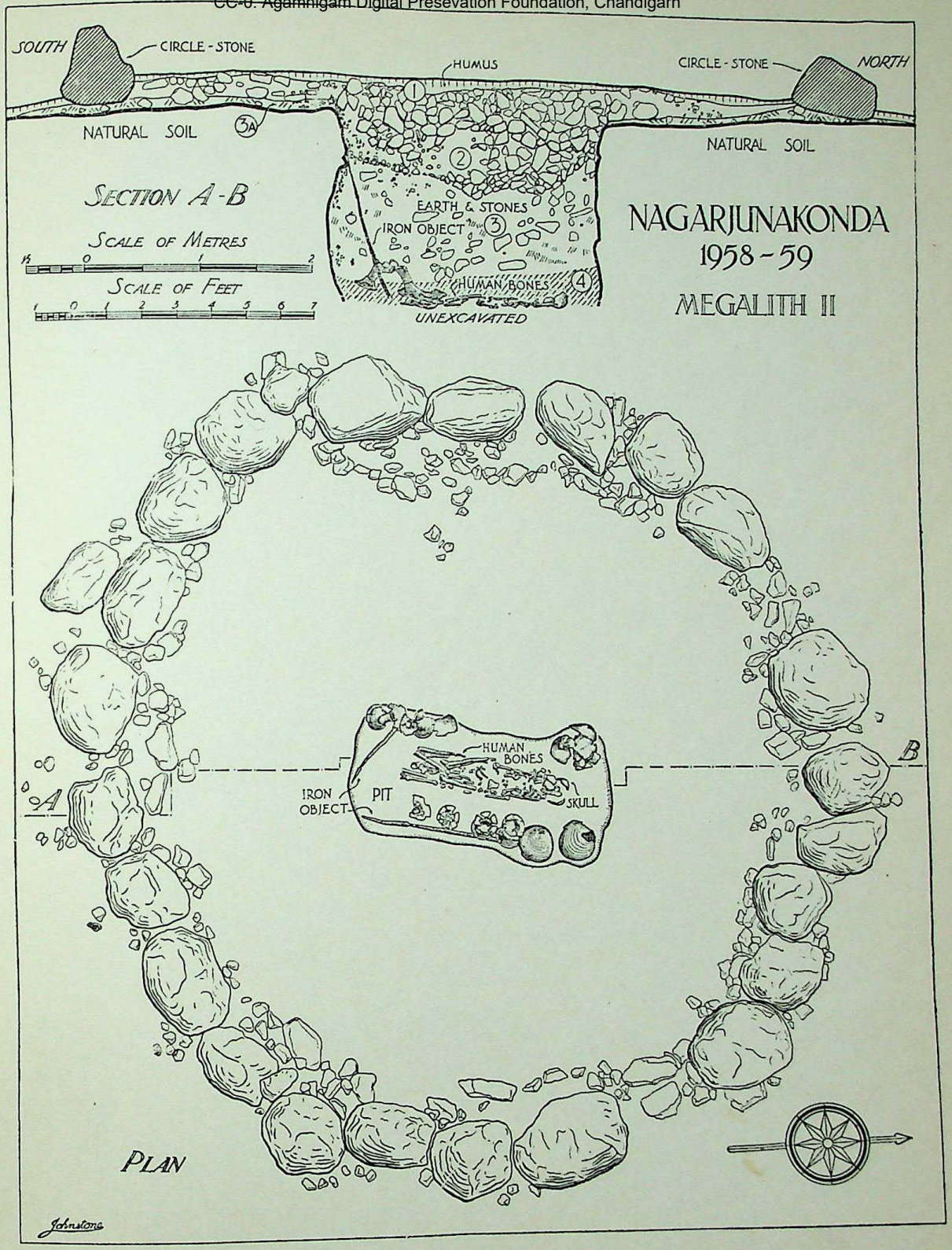


Fig. 27, *A typical pit-circle excavated at Nagarjunakonda*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

found near the neck region, evidently they formed one of the most precious necklaces of the time) 21 earthen pots and 2 iron objects. The burial pit also contained some cattle bones kept over an ashy deposit covering the skeleton. On all counts, it seems to be the burial of the First Lady of the village.[83] Meg. IX is particularly marked for some figures engraved over the slabs which covered the pit. One of them depcited 'a roughly hollowed out figure of an animal' and one other 'bore petroglyphic carving in half-an-inch thick lines, depicting, perhaps, an animal with a rider.' Since this is the only example of engravings in a megalithic context in India it is possible that the cap-stones with engravings belonged to an older non-sepulchral structure in the vicinity. Meg. XII is important for 'the articulated skeleton of grown up bovine animal towards the northern half of the pit. The skull of the animal was cut slightly above the upper teeth portion on the alveolar margin, indicating a sacrifice.'[84] A single pot was placed by the side of the animal. Not only this, about 30 cm. higher than this lay 'the articulated skeleton of a second animal, probably, a calf'.[85]

Kesarpalle

The site is situated near Gannavaram, District Krishna. It was explored by H.V. Sarkar. At the site traces of stone circles and cists have been found, the latter group of monuments had north-south orientation as they had at other sites also in the lower Krishna basin.

The site is important for the section observed in the habitation area. In the mid-levels of the Hallur deposit, a N.B.P. ware sherd was found. 'Some triangular depressions or pits noticed in these levels might have been used as some sort of hearths as these were filled in with chunks of burnt earth and ash.'[86]

Junapani

The site is situated in District Nagpur, Vidarbha, Maharastra, and has been recently excavated by B. K. Thapar.[87] But much before this, it was explored and excavated by two antiquarians: Major Pears in 1869 and Rivett-carnac in 1876.[88] In fact, Vidarbha is almost the northern most limit of the typical megaliths—both architecturally

83. *IAR*, 1959-60, p. 9. From Meg. XII was discoveted a full skeleton of calf.
84. *Ibid.*
85. *Ibid.*
86. Sarkar, *op. cit.*, p. 19.
87. Thapar, *IAR*, 1961-62, pp. 32-34.
88. Rivet Carnac, J. H., "Prehistoric Remains in Central India", *JASB*, vol. XLVIII (1879), pp. 6-14.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and culturally—although, so far only three types of these graves have been reported, viz. pit-circles, menhirs and cists (or dolmens). They come from districts Chanda, Bhandara and Nagpur. So far, about two dozen sites have been explored in Vidarbha.[89]

At Junapani, three cairn-circles—ranging in diameter from 10·21 to 16 metres—have been excavated. In Meg. I the cairn was found covering an irregular shallow pit measuring 8·80×3·50 metres. It also had three ancillary pits in southern-half of the circle. The monument seems to be the counterpart of multiple cist or sarcophagi or urn burials, often found in south India. All of them emphasize the communal nature of the megaliths. Again, in conformity with the south Indian practices, some of these graves have been found containing human skeletal remains while some are found completely devoid of them. In the present example, two of them contained fractional human and animal bones of the Equidae family and one was empty. The central pit yielded pottery, including Black-and-Red Ware, iron objects, gold ornaments, and a stone pestle. Besides these, they yielded fortyfour carnelian beads of which twentyfour were etched. Meg. II was bounded by the concentric stone-circles. Except a few crushed pots it did not yield anything. Meg. III contained 'pottery, gold ornaments, a silver stud, copper and iron objects and human skeletal remains with a gold bangle and spiral ring on it.'[90]

The iron tools from Junapani recovered by Carnac and Thapar include swords, daggers, hoes with flanged sockets, chisels, bill-hooks, razors, nails, sharply curved sickles, buckles, snaffle- bits, spears, lances, flat axes with two cross fastening rings, etc. The domestic objects of iron comprise of a 'ladle with a long rod and handle, and with a shallow cup at the end.' In it may also be included a copper bell with an iron tongue. Of rare importance are six copper (alloyed with gold or silver) bangles with ends decorated with incised designs. (Plate XLIV).

Kampti

About 10 km. northeast of Nagpur is the site of Kampti where major G.G. Pearse had long back laid his trenches across a big cairn-circle.[92] It has yielded, according to the excavator, two extended burials accompanied with a large number of grave goods. Thus, along with the skeleton of a tall person several iron implements, including two

89. Deo, S. B., "Megaliths in Maharastra" *SPPMI*, p. 34.
90. Thapar, *op. cit.*, pp. 32-34.
91. Deo, *op. cit.*
92. Parse, G. G., "Notes on the Excavation of Stone Circle near Kamptee, Central Province of India", *Jr. Ethn. Soc.*, vol. I, pp. 207 and 217.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

steel-tipped plough-shares, have been found. (Fig 30, Nos. 3 & 4) Interestingly enough, on the chest of the deceased, a copper lid of a dish was found. It was beautifully decorated with the figures of a bird, snake and geese. At a little distance from this, another skeleton was found along with iron knives, spoons, a frying pan, spatula, plough-share and a 'very large wire ring of alloyed gold'. On the ribs of this skeleton also the lid of a copper or bronze dish, surmounted by a few birds in round, was found.

The above details show that the cultural assemblage is more or less the same as recovered from the Junapani graves, except in two items : bronze lids and iron plough-shares. It will presently be seen that similar lids come from Khapa, another megalithic site in District Nagpur, and Adichanallur, Tamil Nadu, and similar plough-shares come from the megaliths of Hyderabad, Andhra Pradesh. It may incidentally be mentioned that lids crowned with birds, animals and men occur in terracottas recovered from the megaliths of Nilgiri[93] but these megaliths seem to be tribal megaliths of comparatively recent times and not the ancient ones since the total assemblage from these graves is absolutely different from the assemblage from any other magalith in India. Moreover, the practice of cremation was practically unknown to the builders of the ancient megaliths while it was widely practised in the Nilgiri as the ash deposits and burnt bones from the megaliths of this place show.

Khapa

Recently, S. B. Deo has excavated the burial site of Khapa, on the Venna, in District Nagpur.[94] The cemetery consists of only cairn-circles, ranging from 12 metres to 26 metres in diameter. So far, only nine of them have been excavated. They yielded, besides fragmentary human bones, bones of animals of the Equidae family, pottery, beads, iron and copper objects. The pots recovered belonged to the Black-and-Red Ware and a micaceous red ware. They were devoid of any painting, although from the habitational mound, called Takalghat, on the other side of the river, a painted ware (black-on-red) has been found in profusion. The iron objects included a sword, a spearhead, some adzes, drills, a cauldron (Fig. 28) and fragmentary blades. The copper objects account for bangles, pokers, adzes and drills (Fig. 30). The cauldron is indicative of communal feasts. An interesting object listed is a copper dish with a boss in the centre. It was covered with a conical lid crowned with four birds, resembling those found on similar lids at Adichanallur. Exactly similar is the situation regarding another lid crowned with four flower buds.[95]

---

93. Breaks, J. W., *An Account of the Primitive Tribes of the Nilgiris*, (Lond. 1870) Pl. XXXVI.
94. Deo, S. B., *Excavations at Takalghat and Khapa*, (Nagpur, 1970).
95. Rea, A., *Catalogue of the Prehistoric Antiquities from Adichanallur and Perumbair* (Madras, 1915) pl. II.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

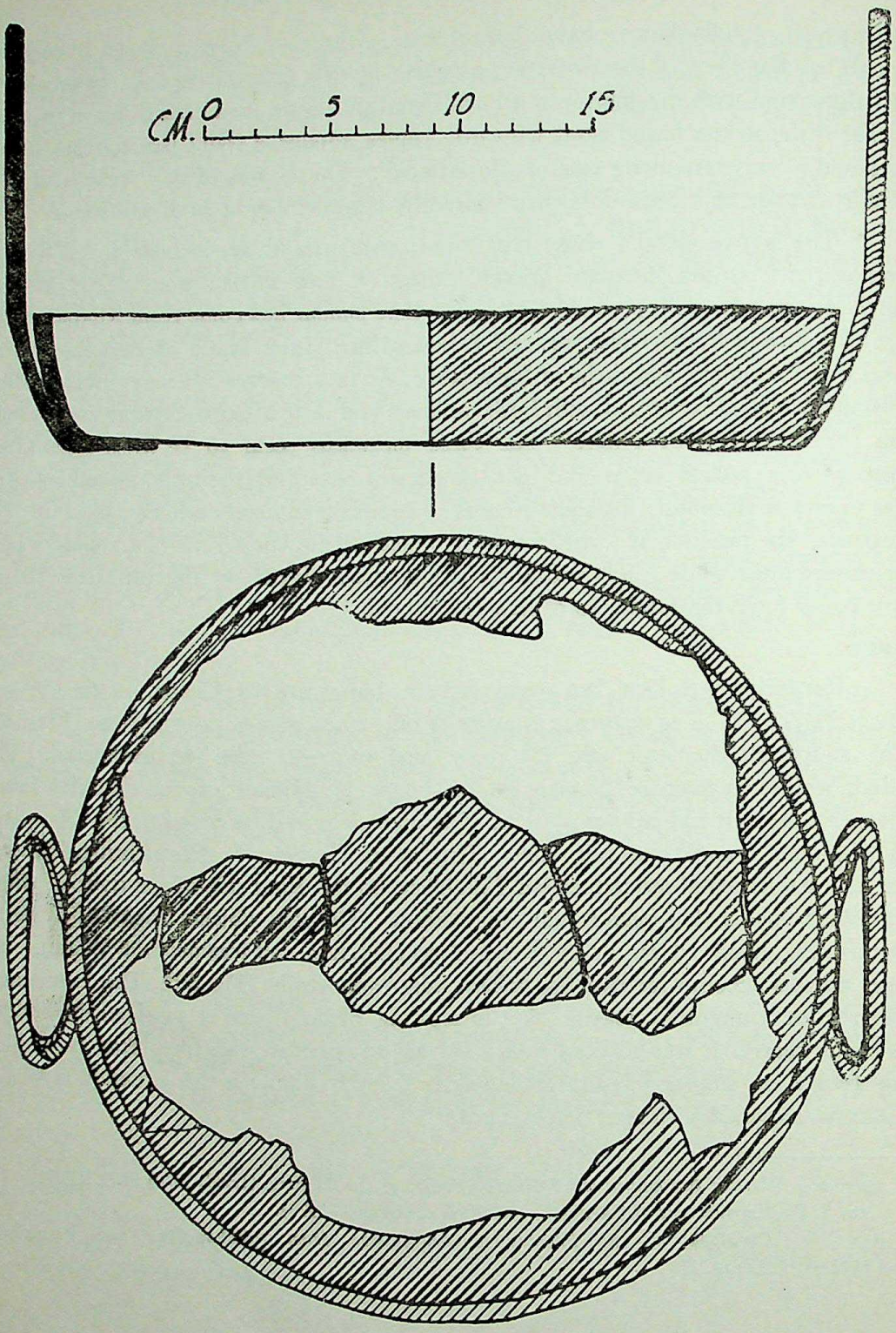


Fig. 28. *A Cauldron of iron from Khapa*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

A unique antiquity, found along with the bones of the horse, is 'an ornament of thin copper sheet, resembling the face of a horse, with several conical knobs fixed on it with iron rivets and a score of hollow tubes suspended from it. These remarkable objects do not seem to have any parallels in the megaliths of south India.' (Fig. 29) Unfortunately, the hollow tubes have been identified by Leshnik[96] as shaft-hole axes, apparently, by seeing only the photograph of this object published in *IAR*, 1967-68. Fig. 20.

In connection with the Vidarbha megaliths, some new developments have taken place, particularly, regarding the potteries found in the habitation sites and in the corresponding melgalithic graves. Thus, in 1960-61 excavations, the habitation site of Kaundinyapur,[97] District Amaravati, yielded typical Hallur (megalithic) Black-and-Red Ware along with a painted black-on-red ware. The 1961-62 excavations of the Junapani[98] graves also yielded, besides this Black-and-Red ware, a painted black-on-red ware bowl with hole-mouth spout.[99] In 1968 the excavations at Paunar,[100] District Wardha, also yielded a painted black-on-red ware along with Hallur Black-and-Red Ware. In 1969, the excavations at Takalghat,[101] District Nagpur, also revealed the existence of the same Black-and-Red Ware along with a painted black-on-red ware. It is, therefore, clear that in the Vidarbha region a painted black-on-red ware existed side by side the Hallur (megalithic) Black-and-Red Ware. This Iron-Age painted pottery is, however, not the same as Chalcolithic painted black-on-red potteries of central India, although it might have been inspired by the latter.

The most important point to be remembered in this connection is almost the total absence of painted pottery in the graves. Looking at the entire megalithic complex in India, one finds that except probably in a few examples at Adichanallur, Coimbatore, etc., no where the megalith builders used painted pots for making offerings to the dead, although at many habitation sites in different regions they used them in everyday life. There seem to lie some strong taboos against their use in funerary rituals.

The megaliths of Khapa have been dated indirectly 'between 7th-8th cent. B.C. and 4th cent B.C.'[102] It has been calculated with reference to a C-14 date obtained on a sample from the middle levels of Takalghat. Below this level there is a 2 metre deposit of the Hallur (megalithic) Black-and-Red Ware. Now it is anybody's guess

96. *IAR*, 1967-68, pp. 33-34.
97. Leshnik, *op. cit.*
98. *IAR*, 1961-62, pp. 32-34.
99. Thapar, *op. cit.*
100. Deo, S. B. and Dhavalikar, M. K., *Paunar Excavation*, p. 6.
101. Deo, *op. cit.*
102. *Ibid.*, pp. 13 and 14.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

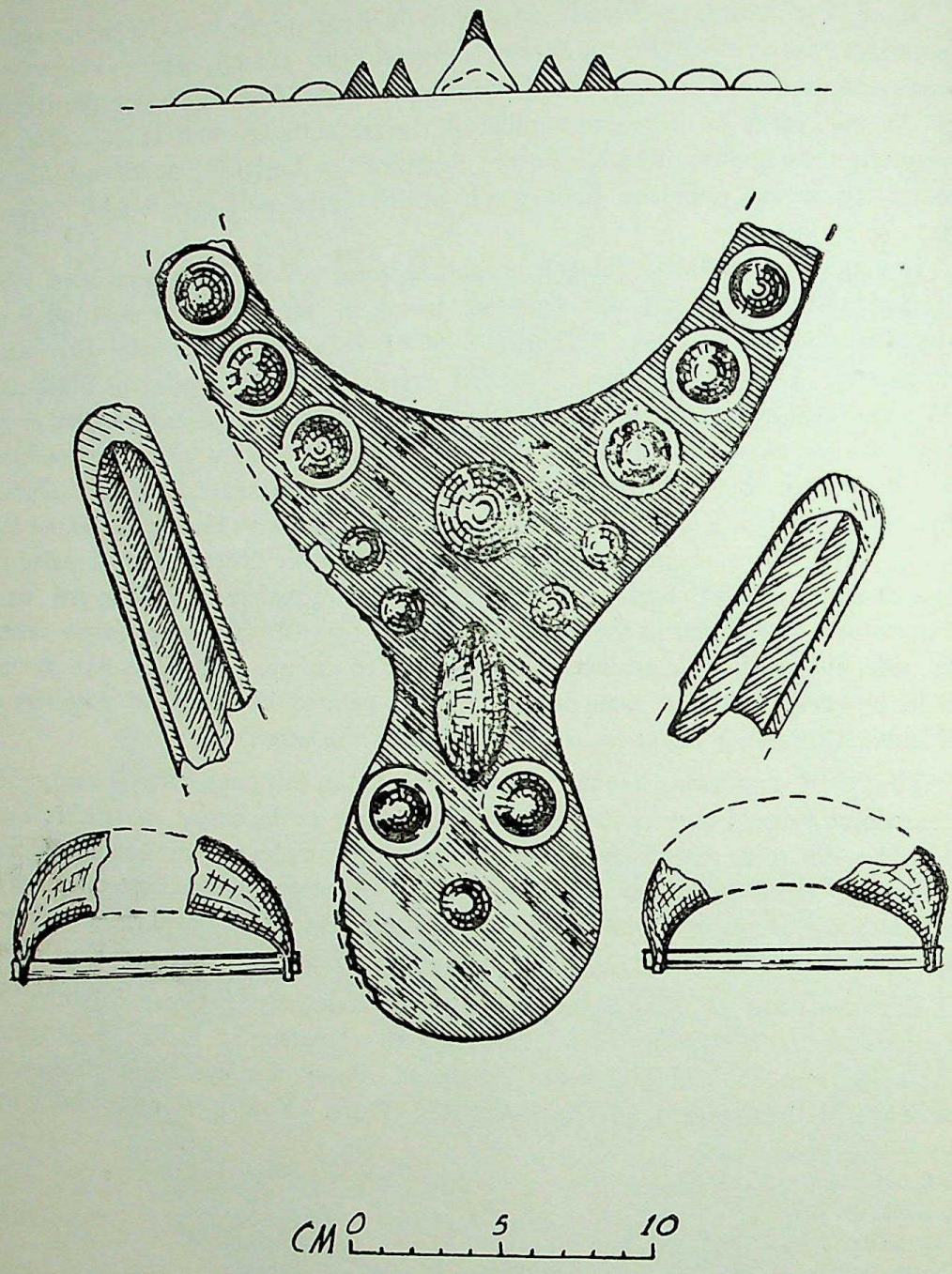


Fig. 29. *Bronze and iron face-cover of a horse Khapa*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

to date the lowest level. Deo has given 200 years to it and dated it to the 8th century B.C. which may be reasonable. It may, however, be made clear that this date of the lowest level of Takalghat may or may not belong to the megalithic graves. It is not necessary that those who settled at Takalghat for the first time also started erecting megaliths ; it is possible, though necessarily not, that the builders of the megaliths came a little later.

MENHIRS AND ALIGNMENTS

Menhirs and Alignments have been reported quite often from different parts of India, but, so far, not more than half-a-dozen of them have been excavated. That, by and large, nothing was buried below them is amply clear from the excavated examples at Maski and Piklihal in District Raichur, Andhra Pradesh, and at Dhanora, District Raipur, Madhya Pradesh. There may, however, be an exception noticed at Devikulam, Kerala.

Devikulam

In one example, 'a burial-urn containing four pots and an iron axe 5½ inches long and 3·3/4 inches broad' were reported in two trial digs below a menhir at Devikulam, Travancore, Kerala. In fact, according to Poduval, the excavator, the 'excavations at other menhirs revealed more or less the same results.'[103]

The evidence of Devikulam is, however, a little doubtful. The measurements of the burial urn actually indicate that it was a separate urn-burial, probably, found near a menhir. It is not impossible because at most of the places in Kerala monuments of several types are found occurring together in one and the same cemetery. The excavator observes that 'the urn was 2′ 7″ high, 3′ 5″ wide and 3″ thick. It was found covered with a stone slab 1′ 11″ square and 4″ thick.'[104] Obviously, the menhir could not be planted over the capstone of such a big urn, and the urn burial was not directly related to the menhir.

In south India, with the menhirs, alignments and avenues have been reported only from Kerala, Andhra Pradesh and Madhya Pradesh. They are generally of granitic rock, even when they are found in the lateritic zone of Kerala. Sometimes, however, they are also of dolerite and sandstone.

Maski

The excavations of two menhirs of an alignment at Maski have 'revealed that

---

103. Krishna Iyer, L. A., "Prehistoric Archaeology of Kerala", *The Modern Review*, (March, 1946) p. 186.
104. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

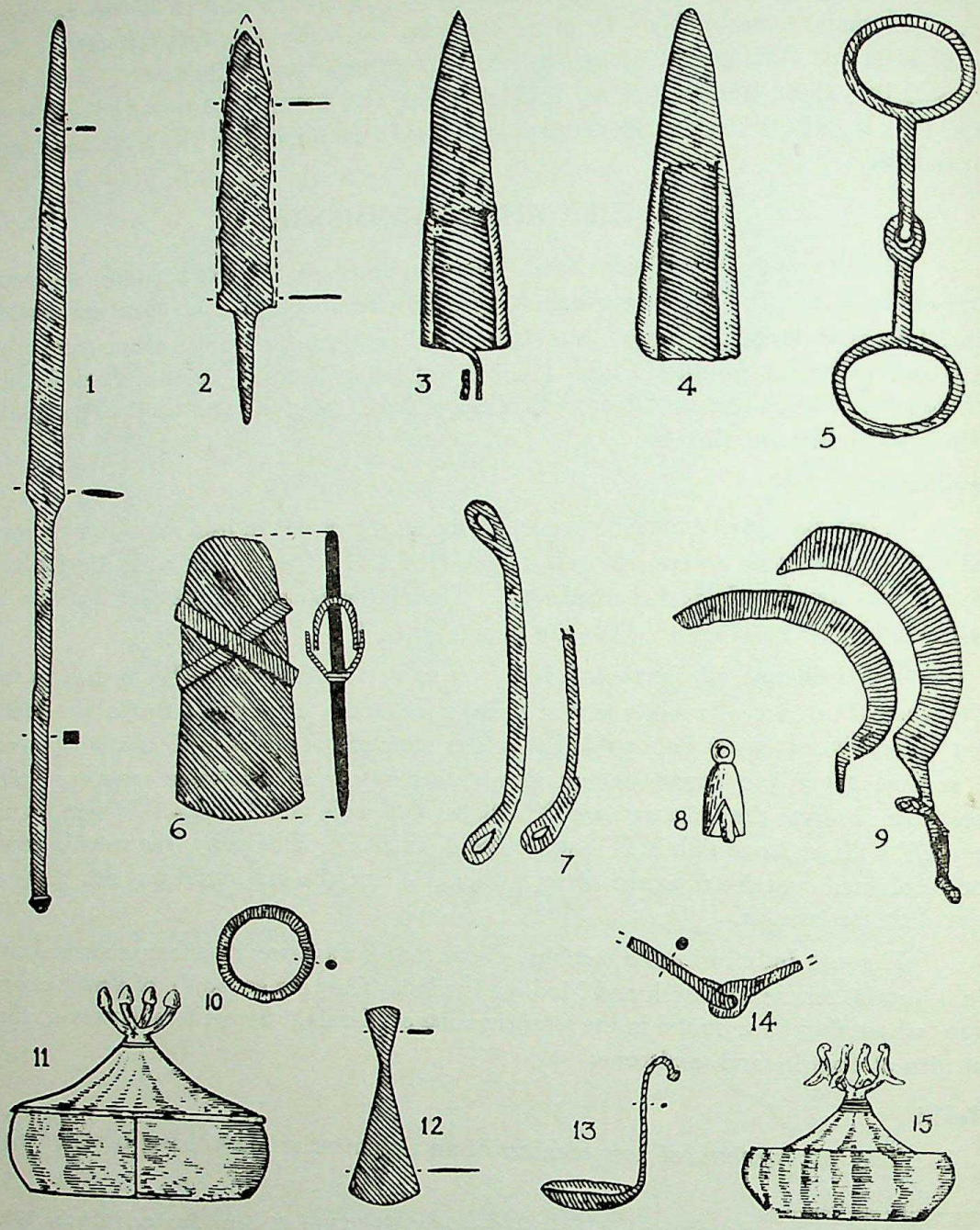


Fig. 30. *Iron implements and copper-bronze objects from Khapa and Kampti*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the menhir was raised on the existing ground itself, without any pit, and propped up all round by a ring of rubble packing. No sepulchral association was observed."[105]

Piklihal

The excavation of a menhir at Piklihal has shown that it was also planted in a pit of about 45 cm. depth. Here also no artifact or bone was found. Allchin. therefore, wrote : "they seem to suggest commemorative and perhaps magical and prophylatic function for the stone."[106]

Dhanora

At Dhanora the menhirs were found placed within the apsidal cairns surrounded by stone-circles. They were generally slightly less than 2 metres in height. When excavated, nothing was found below or around them.[107]

Burzahom

At Burzahom in the Kashmir Valley, the evidence remained the same, although near one of them a burial of complete inhumation has been reported. The excavator, T. N. Khazanchi, has clearly mentioned that stratigraphically the association of the menhir with the burial could not be established.[108]

Menhirs have also been found at some other sites in the Anantanag district[109] and in the Kistawar valley[110] of Jammu and Kashmir. In some examples, it has been claimed that the pottery, charcoal and bones were found near the menhirs, probably indicating cremation. However, unless these are dug systematically by a competent archaeologist we might only record the evidence without drawing any conclusion.

URN FIELDS

One of the most important category of graves, allied to the megaliths, by virtue of the cultural material found in them, is known as Urn-burial. Although the urn-burials are found occurring in different cultural contexts and periods, in the mega-

---

105. Thapar, B. K., "Maski 1954.....", *Anct. Ind.*, No. 13 (1957), p. 35.
106. Allchin, F. R., "The Stone Alignments of Southern Hyderabad", *Man*, vol. LVI, No. 105 (1966), p. 184. See also pages 133-36.
107. *IAR*, 1956-67, p. 35.
108. *IAR*, 1961-62, p, 19. See also, A. K. Sharma, "Neolithic Human Burials from Burzahom, Kashmir", *JOIB*, vol. XVI, No. 3 (1967), p. 249, and B. M. Pande, "Ādim Kashmir Ke Gartavāsī" *Sanskriti*, vol. III, p. 458.
109. *IAR*, 1962-92, pp. 109-10.
110. Singh, P., "Megaliths of North-Western India', *SPPMI*, pp. 50-51.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

lithic context they are generally found in hundreds in cemeteries large and wide, called 'fields'. Not only that, they are also collective in nature, entombing the bones of several persons, as any other megalithic burial did. Similarly, the bones in them are also post-exposure in nature as they are in cists or pit-circles.

Adichanallur

The site is situated about 20 km. south-east of the Tirunevelli town in Tamil Nadu. It covers about 114 acres of waste land concealing hundreds of urn burials The urns are pyriform and huge, accommodated in pits, 1·2 to 2·80 metres in diameter and 2 to 4 metres in depth. One of the early explorers, Kearns,[111] has mentioned the presence of circles of unhewn stones round them but later explorers like Rea have completely denied having seen any of them.[112] May be, by then they had already been removed by the ignorant villagers.

The urns contained fractional bones. However, in a few examples complete skeletons have also been reported. Thus, Cammiade has mentioned a complete squatting burial in an urn at a site called Vasudevanallur, in the Adichanallur urn-field.[113] From this he also discovered gold plated wood beads and glass bangles and beads of different types, sizes and colours. The grave-goods from the urn burials at Adichanallur[114] now number 8000 and odd. Besides the usual tools and weapons of iron, they include iron tridents, tripods, lamps, etc., generally not reported from the megaliths of other sites. (Fig. 31) These graves are, however, particularly known for their bronze and gold objects. The bronze objects include beautifully decorated vase stands, lids, bowls, jars, cups, sieve-cups, strainers, bells, plaques, bangles, etc. The decorations are generally executed by incised lines and they are in geometrical and floral patterns. In some examples, the lids are crowned with birds animals and flowers in round comparable only to those found in a few examples at Khapa[115] and Kampti[116] near Nagpur. The gold objects are beads and diadems. In some examples diamonds have also been reported. The pots are of Black-and-Red Ware sometimes painted with white in dotted lines

Amrithamangalam

The site is situated in District Chingleput, a litthe north of Madras. It is extended over a vast lateritic field in which, so far, over 250 urn-burials have been counted. The number, however, also includes sarcophagus-burials.

111. Kearns, J. T., "The Cairns of Tinnevelly", *MJLS*, vol. XXI (1859), pp. 27-30.
112. Rea, A., *Annl. Rept. ASI*, (1902-3), p. 117.
113. Cammiade, L. A., "Observations upon Ancient Sites in the neighbourhood of Kalugmaliai", *Man*, vol. XXX, No. 136 (1930), pp. 187-88.
114. Rea, *op. cit.*
115. *IAR*, 1967-68, p. 34. Also, Deo, *op. cit.*
116. Pearse, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

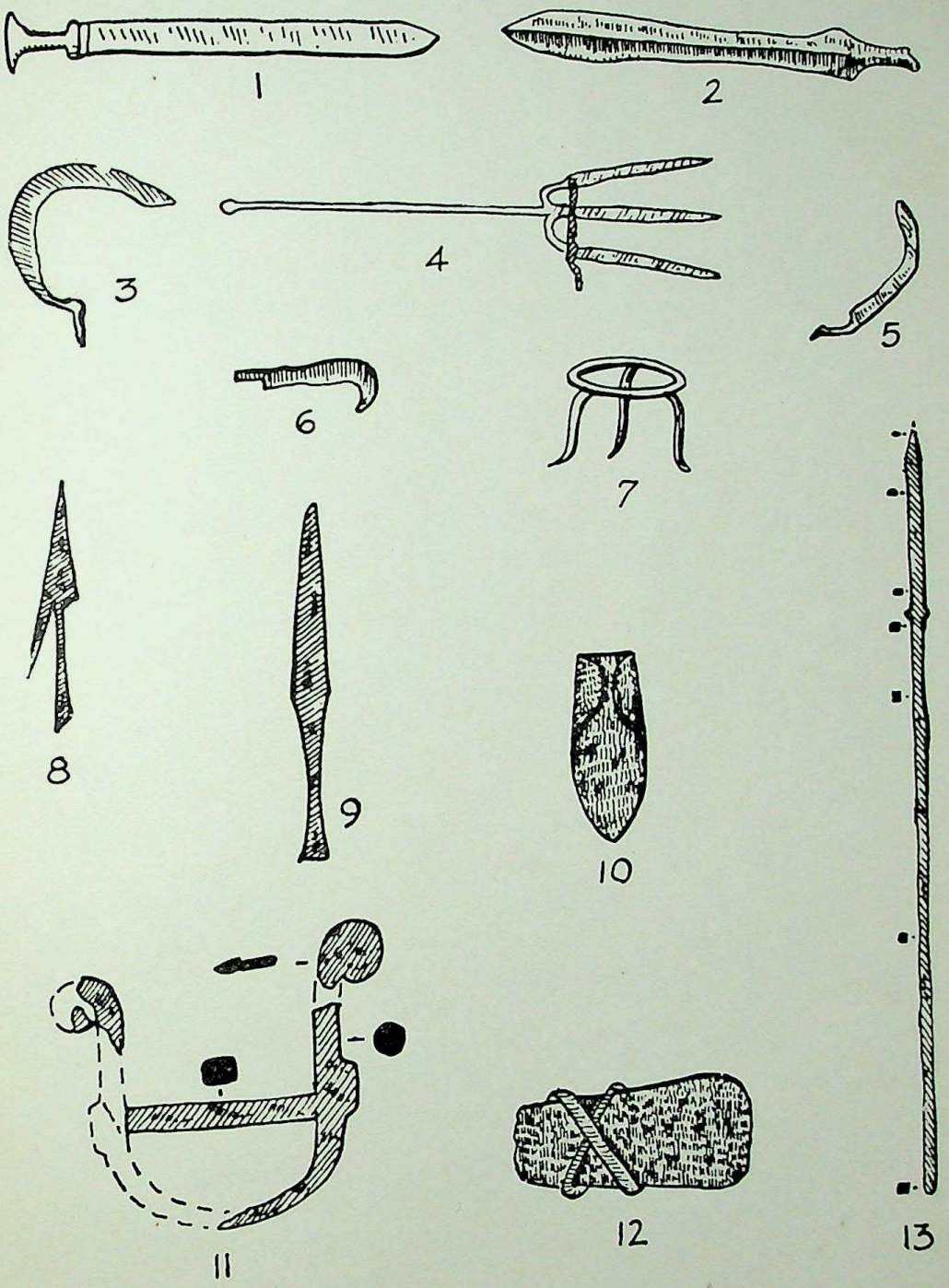


Fig. 31, *Tools and weapons of iron from the Urn burials excavated at Adichanallur, No. 11 is a horse-bit*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The graves are marked on the surface not by stone-circles but by a thin spread of stone-chips, mostly of granite rock, and have been called 'barrows', probably, for want of a better term. The urns are either pyriform or globular, and buried in pits deep enough only to accommodate them. It has, however, been significantly observed that small blocks of laterite 'deliberately cut, have been invariably placed into the top of the pit along its edge'.[117] It seems to be an imitation of the megalithic practice of building a stone-circle round the grave. The graves containd fractional bones of several persons. In one example the skeletal remains of a horse have also been found buried. The grave goods, as usual, included Black-and-Red Ware pots and iron implements. The sarcophagus burials presented the same features. Banerjee has called these urn burials as 'degenerate'[118] but that is a purely subjective interpretation.

ORIGIN OF INDIAN MEGALITHS : PROBLEMS AND PROSPECTS

Whence came the urge of erecting megaliths in India ? There has been so much speculation on this problem that one cannot and should not further waste energy even in summarizing the arguments, many of which are unfounded guesses. Recently, Banerjee[119] has examined them and there is no need to repeat the same. It is enough to remined ourselves that Gordon placed the original home of the Indian megaliths in southern Arabia;[120] Heine Geldern in Central Asia;[121] Walter Ruben in Plestine;[122] Wheeler in the West in general,[123] Haimendorf on the Mediterranean coast[124] and Banerjee in Baluchistan.[125] After Banerjee's work Allchin and Leshnik have put forward their own views. Since Banerjee's theory has already been examined (while dealing with the cairn burials of Baluchistan), only Allchin's and Leshnik's theories remain to be examined.

---

117. Banerjee, N. R., "The Megalithic Problem of Chingleput in the light of Recent Exploration", *Anct. Ind.* No. 12 (1956), p. 31.

118. *Ibid.* See also B. K. Thapar., "Porkalam 1948...." *Anct. Ind.*, No 8 (1952), pp. 3-16.

119. Banerjee, N. R., *Iron Age in India*, pp. 40-67.

120. Gordon, D.H., *The Prehistoric Background of Indian Culture*, p. 18.

121. Banerjee, *op. cit.*. Foreword. pp. IX and X.

122. Ruben, Walter, "Eisenschmiede und Damonen in Indien", Internationales. Archiv Fuer Ethnographie. Band XXXVII, Supplement, Leiden (1939), pp. 154-58.

123. Wheeler, R. E. M., *Early India and Pakistan*, p. 168.

124 Haimendorf, C. von Fuerer, "New Aspects of the Dravidian Problem", *Tamil Culture*, vol. II, No. 2 (1953). M. Shesadri has, however, refuted the theory of western origin of Indian megaliths. See his book, *The Stone Using Cultures of Prehistoric Mysore* pp. 59-72.

125. Banerjee. *op. cit.*, p. 66.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

According to Allchin 'the south Indian graves appear as a developing complex with several streams of influence combining in them.' These streams have been enumerated as follows[126] :

(i) Some grave types are reminiscent of those of Central Asia, Iran and the Caucasus, and 'could well represent traits brought from these areas by Indo-European speaking immigrants.'

(ii) Some appear as developments of the indigenous Neolithic-Chalcolithic burial customs of the Deccan.

(iii) It is a series of influences :

(a) Stone-cist graves, with or without port-holes, are found in the Levant and on the coasts of Arabia.

(b) Pottery sarcophagi occur in Mesopotamia and the Persian Gulf region during the late centuries B.C.[127]

(c) Legged urns identical to Indian types are reported from the Yemen

(d) The above three regions provide evidence of rock-cut graves with shaft-like entrances, in forms strikingly reminiscent of those of the Malabar coast.[128]

---

126. Allchin, B. & R., *The Birth of Indian Civilization*, pp. 229-30.

127. K. N. Dikshit has quoted a few good exampley of the legged and plain earthen sarrcophagi, sometimes with anthropomorphic lids, from Baghdad, Beth-Shan, and several places in Palestine some of the examples seem to be of the Early Iron Age which go back to 1200 B. C.

Dikshit, K. N. "The Origin and Dirtribution of the Megaliths in India", *SPPMI*, p. 5. For the Baghdad reference see also, Jones, I. N. and Hall, J. *Bom. Br. R. A. S.* vol. IV (1853), p. 378. In Mesopotamia they were in use since 3000 B. C.

128. In Wadi 'Amd, opposite town Hureidha in South Arabia, Caton Thomson (a) has explored some round caves containing rock-cut benches with earthen pots and implements of bronze and iron. Some beads found in them are to be dated to the 7th-6th centuries B. C. K. S. Ramachandran (b) has collected a large number of references of the shaft-graves occurring in Palestine and Cypres. In Palestine they range in date from the end of the 4th millennium B. C. to the 5th century B. C., well into the Iron Age. In Cyprus also they belong both to the Bronze Age and the Iron Age. In both the countries along with complete inhumation, fractional burials are found. Although in Palestine and Cypres the graves are circular, trapezoidal and rectangular in Kerala they are near rectangular only. Kerala type steps are found both in Cyprus and Palestine (at Tell Fara) during the Iron Age. Megiddo in Palestine is a site where the grave was as multichambered as it was in Kerala. Benches of the Kerala grave type are also found both in Palestine and Cyprus.

(a) Thamson, Cotan, *The Tombs and Moon Temple of Hureidha (Hadhramaut)*, pl. XXV and XXX.

(b) Ramachandran, K. S., "Megalithic Rock-cut Caves and their Parallels outside India", *SPPMI*, pp. 59-65.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Allchin, however, ends with a pertinent remark : 'strictly speaking, not all these examples are dated with any precision, and therefore they can scarcely provide a firm basis for comparisons'. But still he hastens to suggest 'that during the first millennium B.C. India received them as influences by dint of maritime contacts with the Middle East.'[129] Necropolis B at Sialk, is the place in the Middle East with which he visualized major contacts. Horse-bits and bells of iron in several megaliths, as well as the jugs with long raised channel spouted bowls and a small bowl-on-stand found in two megalithic graves in the Perumal hills, Kodaikanal, District Madura, have been quoted to demonstrate these contacts.[130]

Theories like this can never be completely proved or disproved. Allchin has, in fact, incorporated in his theory all the prevailing theories mentioned above, except, probably, that of Banerjee. Recently, K. V. Soundara Rajan has also subscribed to this view when he said, "they (megaliths) are composite in their architectural ingredients and from diverse original sources, maritime as well as overland. Thus within the country iself they would divided into many 'first arrival' zones later resulting in contact zones of hybridisation and diffusionary zones of transmutation. Unifocal or uni-directional theory for their arrival and dispersal within the country would, therefore, be inadmissible".[131] However such a middle-path theory may have much truth in it but the solution of the problem is as distant as it used to be. This is being asserted because, as said earlier even by Allchin, the chronological position of most of the cultural elements, the parallels of which seem to exist in the Middle East, is generally hopelessly uncertain. Allchin and Soundara Rajan lead us to believe that the megalithic complex in south India is not a single complex, not even a combination of two or three streams, but a conglomeration of several of them, probably forming itself at different times within the first millennium B.C. However, in this whole account it has not been made clear as to how the culture-complex found in the megaliths has been, in more than one way, uniform in character. Is it that all the 'first arrivals' arrived at one and the same place and adopted the same culture complex ? Is it a fact that one arrival brought the three legged pot, the second arrival brought the spouted pot, the third arrival brought the sarcophagus, the fourth arrival brought the cist, and so on? All this does not appeal to reason. Such polygenetic theories were prevalent in Europe also for quite

129. Allchin, *op, cit.*, p. 230. B. Subbarao was, however, not in favour of 'maritime' theory. See his "Megalithic Problem of South India and the Dravidian Languages", *TASSI*, Silver Jubilee volume (1962), pp. 132-51.

130. Allch n, *op. cit.*, p, 230. See also, A. Aiyappan "Rude Stone Mounments of Perumal Hills, Kodai Kanal", *JMS*, vol. HXXI (1940-41), pp. 372-379).

131. Soundara Rajan, K. V., "Megalith and Black-and-Red Ware", *SPPMI*, p. 76.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

sometime. Not only that, it has also not been shown as to where and how these streams mingled in the Indian mainstream. If there are several 'contact-zones' and 'diffusionary zones' than how to correlate them with the 'first arrivals' and prepare the history of each stream and mark their arrows on the map of India.

In the whole analysis it is equally not mentioned if there are real good parallels of iron tools and weapons in regions outside India.* Is it a fact that one of these first arrivals also introduced iron technology in south India ?

Probably, all these enquiries are necessary but beyond satisfactory answer at this stage of our knowledge. Let it be once again emphasized that parallelism of individual items without regard to chronology is not always safe, at least no generalization and theories can be built on it. It does not, however, necessarily imply that we have a bias for the unidirectional theory ; in fact, far from it, since we completely agree with Glyn Danial when he states that the "megaliths do not represent a single unitary movement but *contacts along the same route over many centuries.*"[132] Thus, although basically I agree with Allchin and Soundara Rajan as far as they maintain that the megalithic complex of south India was a developing complex with several streams of influence yet I am not very much convinced of all the sources of influence Allchin has mentioned (which are located from south-western Arabia to northern Iran). To us, it appears that there were not so many streams of influence in the south Indian megaliths. There were certainly two routes for the immigrants, one which came overland and the other which came through the sea. Each of the routes might have been in constant use for quite some time but no one tried to solve the problem of the contact between the influences coming from these two routes. Although N. R. Banerjee appreciated the problem very well, he could not overcome the temptation of solving the problem finally even though he knew the unsurmountable limitations of the excavated material from Central India and the inherent falacy of the unifocal and unidirectional theory that he happened to project. G. R. Sharma created a fresh difficulty by announcing his hypothesis according to which some of the Mirzapur megaliths went back to the chalcolithic times (1500 B. C.) thereby making them the oldest of the lot we have in India. Unwittingly he became the champion of the indigenous theory regarding the origin of Peninsular megaliths. It was the direct blow on all the theories of western origin of Indian megaliths. Whatever may be the fate of this claim, to us, at the present state of the archaeological evidence, we have no escape from the 'double route' theory although we feel that in the growth of the Indian megaliths the contribution of the overland route was very little. However, Banerjee and Leshnik think just the opposite.

---

* See Appendix III, as also Leshnik's theory a little later

132. Danial, Glyn, *The Idea of Prehistory*, p. 100.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

To us the overland influence seems to lie in the practice of erecting cairncircles. They are present at a number of sites in the north, viz., Baluchistan sites, Swat Valley sites, Saurashtra sites, Vindhyan sites, sites near Nagpur, sites in the Chanda District, sites in the Raipur District, etc. At times they entomb simple pits and at times slabbed-pits. Basically, many of them were non-megalithic in form but as they moved towards the south they seem to have intermingled with the megaliths as well as with the local non-megalithic graves, as has been shown earlier. Typical port-holed cists and dolmens, the real megalithic types, are practically unknown in the Vindhyas.

The maritime influence seems to lie in the dolmens and slabbed cists. In Kerala they abound and in Mysore and Andhra Pradesh they get elaborated architecturally. In Kerala they crossed with the local ideas and produced some of the local forms, e.g., Topikals and Rock-cut caves. It is possible, though not certain, that the terracotta sarcophagus also came through this route ; in the beginning it was small in size, as seen in the Kerala examples, but later on got elaborated in Tamil Nadu, assuming even zoomorphic forms. If it really came from outisde, it certainly came independent of cists and dolmens.

It is equally possible that the knowledge of iron metallurgy came to India through the same two routes, the northern land-route and southern sea-route. The peoples who brought it seem to be both megalith builders and non-megalith builders. That is precisely the reason why we get almost identical C-14 dates, of about 1000-800 B.C., of the earliest iron tool bearing levels both in the north and the south, at Timargarha (Swat Valley) and Hallur (Dharwar) respectively. The two streams seem to have come into contact somewhere between the Upper Godavari and Lower Tapti ; the exact place cannot be determined at present.

Now, we may take up Leshnik's theory. In historical studies, sometimes old theories, already discarded years ago, are revived and given a new fillip, generally in the light of new evidence but also sometimes under false notions and incomplete knowledge of the new data. One such attempt has recently been made by Leshnik. He writes : "In the middle of the last century...megaliths in both the east and the west were attributed to Druids, Scythians or some other Turanian 'Urvolk'. Yet this interpretation is, in my opinion, not so far off the mark as it may at first glance appear."[133] Further, "...we see the origin of the Pandukal Complex (i. e., South Indian Megalithic Complex) in nomadic incursions the west which are possibly to be associated with the disruption of the ancient policies brought about by Alexander the Great. Indian history is quite familiar with such

133. Leshnik, L. S., "Early Burials From the Nagpur District, Central India", *Man*, vol. 5, No. 3 pp, 498 ff.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

nomads as the Sakas and Kushanas. It is my belief that alongside and parallel to the movements of these peoples, there were lesser groups as well...Arriving via Baluchistan and Sind, these groups eventually established themselves in an area of the Peninsula roughly defined by the 14th and 17th parallels...Since the association of the earlier neolithic cultures of the Indian peninsula with western pastoralist nomads has already been suggested (Allchin 1963), this new series of movements can be considered to follow an established route. Nagpur, lying rather to the north of the main distribution area, represnts an early stage in the southward movement. Adichanallur and other sites south of this main belt represent somewhat later stages. For this reason stone cists are seldom found in the region of Tinnevelly and Arcot where simple urn burials are substituted."[134] In support of his unifocal and unindirectional theory Leshnik has tried to pick up a few parallels of individual 'megalithic' artefacts in the complex of Central Asian antiquities of the period between the 3rd century B.C. and 2nd century A.D., e.g., decorated bronze lids and ladles have been compared with certain items found in Parthian Taxila,[134a] small bronze and iron jingles have been taken to belong to Central Asia, [134b] copper bangles with incised decorations on the two ends have been compared with similar bangles from the Caucasian region of a much earlier date, a buckle from Junapani has been compared with a few moveable tongues appearing during the 3rd centuty B.C. in Central Asia.

Needless to say, that once again more confusion has been added to the already existing uncertainties and confusion. Putting Allchin and Leshnik together we have now parallels of individual material items recovered from the Indian megalithic graves in an area stretching from Yemen in south-western Arabia to the Aral Sea, across Mesopotamia, Iran, Caucasus and Central Asian Republics of the U.S.S.R. I have also shown in Appendix III that there are some iron implements the parallels of which may be seen in the older La Tene collection of Switzerland. Similarly in Appendix VI have tried to build up the theory of Gulf of Oman for the original home of the Megalith builders in India. But I am, more or less, convinced that in the name of diffusion such parallels, when quoted, may be good to our knowledge but add very little substantially to the solution of the problem of the origin and diffusion of south Indian megaliths, particularly when the factors of time and space are completely overlooked. One would like to ask Leshnik as to why C-14 dates of *circa* 1000 B.C. (Hallur, Dharwar), 550 B.C. (Takalghat, Nagpur) and 900 B.C. (Gandhara Graves, Swat Valley) be completely overlooked when the chronology of Indian megaliths is to be fixed? How has he dated the Nagpur megaliths to 300 B.C. (when Takalghat has given us the

134. *Ibid.*, p. 509.
134.(a) *Ibid.*, p. 507.
134.(b) *Ibid.*, p. 502.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

date of 550 B.C.) and the Tinnevelly megaliths to the latest period, (which, according to him, falls in the 2nd century A.D.) when there is hardly any object of absolute dating. Similarly, why the absence of typical south Indian megalithic graves between Central Asia and Central India be not explained satisfactorily before we put forward the Central Asian theory ? Curiously enough, Leshnik compares certain typical material items from Nagpur megaliths, e.g., decorated lids and hoes with flanged sockets, with those found in the Tinnevelly graves and says that the latter form the degenerate stage of Indian megaliths, implying, besides many things, a long time gap between the erection of the Nagpur graves and the Tinnevelly burial monuments. But then how to explain the complete identity between these two items of the so called nomadic people when time and space gap is tremendous ? Further, how to explain the absence of these items in the vast land between Nagpur and Tirunevelli. Similarly, there is hardly and independent proof which may show that the graves in the Arcot and Tinnevelly districts are either later than those in the Nagpur area or degenerate in form ; they are only of two different varieties and the differences may be explained on sociological grounds. [See Introduction]

Further, in the North Arcot region along with the urns, the pit-circles, sarcophagus-circles, etc., are also found, e.g., at Paiyampalli. Over and above this, one would like to remind Leshnik that as he feels (along with N. R. Banerjee that the movement of the megalith builders was from north to south, so also there is a group of scholars—Krishnaswami, Wheeler, Haimendorf Soundara Rajan—who believe that the movement was from the south to the north. At the present state of our knowledge it is difficult to prove or disprove either of these theories. I have a feeling that once the megalithic folk arrived in the zone of first arrival along the western coast they diffused rapidly throughout the peninsula within a few centuries, probably during the 8th, 7th and 6th centuries B.C. It was a sort of colonization. Practically the same sort of megalithic colonization took place in Western Europe during the Neolithic period, i.e., 3rd and 2nd millennia B.C. Through their Passage Graves, Gallery graves and Dolmens, the megalith builders in several waves had swept over Italy, Spain, France, U.K., Denmark, Germany and Sweden. But what is important to remember is the mechanics behind this colonization, whether it was Europe or India. To begin with, it should be absolutely clear to us that there was no megalithic 'race' as such and there could also not be any movement of 'idea' without the movement of people ; their initial number is immaterial since converts to some thing new—which may or may not be religion (it may be art or architectural styles, mode of agriculture or business transactions) themselves become the most enthusiastic media of diffusion. They also become the originators of new or modified styles and forms. Here it may not be out of place to consider the forces underlying the mechanics of diffusion. As mentioned in the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

beginning of this chapter, Gordon Childe (foot note 8) and others had maintained that the underlying force was '*trade*' while Piggot and others (foot note 10) felt that it was '*religion*'. Brondsted, on the other hand, said : 'it is the *idea* of the stone grave that wandered from people to people, land to land.....'[135] These 'trade' 'religion' and 'idea' theories have, however, been criticized by Glyn Daniel. He writes : "Burial chambers are essentially not religious but funerary monuments, their diffusion is not the spread of a religious belief or a body of religious practices. It is the spread of a cult of the dead manifesting itself in a particular funerary practice—that of the collective burial of corpses in large communal vaults—vaults moreover constructed and planned in certain specific ways...it seems to me likely that the spread of burial chambers represents a fairly extensive series of colonising movements...by adventurous folks. Why this colonisation took place, is, of course, an entirely different matter, and moreover a matter for pure speculation. It may have been due to economic causes in the homeland, or it may have been begun, as Childe suggests by "boat-loads of voyagers driven against their will by the wind and currents to these remote solitudes" of Britain and northern Europe. We shall probably never know."[136] Only such a situation of rapid colonization and converts can explain much of the apparent homogeinity witnessed in the burial customs and monuments as also the variety in megalithic types all over the peninsula. Homogenity in the material equipment from Indian megaliths has however been due to some other reasons also : before the arrival of the megalith builders in south India throughout the western peninsula there was a post-Neolithic-Chalcolithic culture, called the Hallur culture, which was characterized by the presence of the Black-and-Red ware, both plain and painted, and iron implements. The immagrant megalith builders, wherever and whenever entered into south India found only this complex which they readily adopted, and then later on, as said earlier, while colonising the country they themeselves became the medium of diffusion to this complex. Leshnik's theory is, therefore, pretty interesting but hardly convincing.

PHYSICAL TYPES

Who were these people and what were their physical types these are some of the other questions often asked but only unsatisfactorily answered. Reports show that there were both dolicocephals and brachycephals among the megalith builders of south India. Sarkar[137] has compared some of the brachycephals from Brahmagiri with those from Sialk Necropolis B, and called them 'Scytho-Iranians.' But he has also reported that some others were mesocephals, comparable to those who live to this day in central

135. Brondsted, *Danmark Oltid*, vol. I, p. 165 Quorted by Glyn Daniel, *PPS*, NS, vol. VIII, 1941.
136. Daniel, "Dual nature of the Megalithic Colonization of Prehistoric Europe", *PPS*, NS, vol. VIII 1941. pp. 47-49.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and western India. Not only that, he has indentified two of the Brahmagiri skulls as Proto-Australoid, the autochthonous population of India. Thus, according to Sarkar the megalith builders had both the foreign strain and the aboriginal strain in them and that the former, probably, belonged to the Indo-European group of people living in Iran and Central Asia.

The skulls from the Adichanallur graves were earlier examined by Zuckerman[138] who identified them as 'Dravidian' of the Mediterranean stock. Recently, Chatterji and Gupta[139] have examined thirteen other skulls from the same site. Of these three show Veddid-Australoid affinity, five exhibit Mediterranean features and one each of the remaining two belongs to 'Armenoid branch' of the Mediterranean and Proto-Australoid types. This again shows a mixture of western and autochthonous physical types in the population of Adicanallur.

Gupta and Dutta[140] have examined six skulls from Yelleswaram of which three were of males and three of females. They were all broad-headed showing features similar to those found in the skulls from Sialk Cemetery B. They, following Sarkar, call them Scytho-Iranian.

Sarkar, as quoted by D. K. Sen,[141] has also studied eighteen skulls from Maski. They have been classified into three groups : (i) mesobrachy-cranic type (Scytho-Iranian ?), (ii) al 'Ubaid' type, and (iii) Proto-Australoid type. They again lead to the same conclusion—there was a mixture of Indian and West-Asian peoples among the megalithic builders of Peninsular India.

If these general observations are correct, the anthropological evidence fits in very well in the scheme suggested by the archaeological evidence.

LITERARY EVIDENCE

Have the south Indian megaliths been referred to in literature, particularly, when their proposed chronology shows that during the later period of their prevalance they did belong to the historical period ? K. R. Srinivasan[142] has amply quoted from the

---

137. Sarkar, S. S., "Human Skeletal Remains from Brahmagiri", *Bull. Dept. Anthp.* vol. IX, No 1. pp. 5-25.
138. Zuckerman, "The Adichanallur Skulls", *Bull. MGM*, NS, vol. II, pt. I, pp. 1-24.
139. Chatterji, B. C. and Gupta, P., "Skeletal Remains from Adittanalur", *Memoir No. 3 of the Department of Anthropology, Government of India.*
140. Gupta, P. and Dutta, P. C., "Human Remains from Yelleswaram", *Man in India*, vol. 42, No. 1.
141. Sen, D. K., "Observations on the Megalithic Skeletal Remains", *SPPMI*, p. 98.
142. Srinivasan, K. R., "The Megalithic Burial and Cairn Fields of South India in the Light of Tamil Literature and Tradition", *Anct. Ind.* No. 2 (1947), pp. 9-16.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Sangam literature to show that they have been referred to. Some of these references may be examined here by way of correlating the archaeological and the literary evidences.

The Sangam literature is an assemblage of anthologies of different poets, as also a few epics like *Maṇimekhalai* and *Śilpadikāram*. It belongs to the period between the Ist and 8th century of the Christian era but, according to Srinivasan, it also embodies traditions going back to the 3rd century B. C and 'the poems in it are realistic and prima facie trustworthy'.

In addition, Srinivasan has quoted from still later sources, the inscriptions, to show that some of these practices continued till the 13th century A.D. However, for this epigraphic evidence there is as yet no archaeological corroboration, except that in the tribal areas the megaliths are still being erected ; but, as said earliar, the tribal megaliths form an entirely different category of monuments both in purpose and construction.

Thus, there is a very important verse occurring in the *Maṇimekhalai* which enumerates five modes of the disposal of the dead followed by the people, viz., cremation (*suḍuvor*), cast-away or exposure (*iḍuvor*), pit-burials (*toḍu-kuli-paḍuppor*), underground cist-burial (*tāl-vavin-aḍaippor*) and urn-burial covered with a lid (*tāliyiṛ-kavippor*).[143] The verse reminds us of a similar verse occurring in *Atharvaveda* (XVIII 2.2.34), although in it two different terms are used for cast away and exposure, viz. *paroptāḥ* and *uddhitāḥ* respectively.

Periyin Meruvalar in a verse written in praise of his Pandayan king Nambi Nedunjeliyan also refers to the different modes of the disposal of the dead prevalent in the society, viz. the exposure (*iḍuku*), cremation (*Śuṭuka*) and complete inhumation (*paḍukuli-p-poḍuka*).[144]

Cremation should not detain us here since there are several references in the Sangam literature which clearly show that a part of the population had already accepted it as a religious sacrament probably, under the Vedic influence.

Exposure, which was the prevalent mode of the disposal of the dead with the megalith builders, has been vividly described in *Puram* 225. It mentions the grave-yards

---

143. *Śuḍuvor - Iḍuvar - toḍu kulippaduppor, Tālvayinaḍaippor - taliyiṛkavippor - Maṇimekhalai* (ch. 6. 11, 66-67).

144. *Iḍuka - venro - suḍukavenṛo, Paḍu - kula - p - paḍuka* (*Puram*, 239, line 20-21)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

(*kāḍu*) as places where the vulture descends on its many foot-paths which cross each other and the strong billed crow flies as it likes, where the carrion-eating jackals, abound, and the hordes of demons with their teeth defiled by carrion, grasp the skeletons of the dead and eat the white flesh till their mouths reek of the odur and where lie strewn fragments of white bones and numerous stones concealed by the overgrowth of jungle.[145]

Pit-burial and cist-burial are also represented by terms like '*Kurakkuppadai*' or '*Kurakkuppuaṭṭadai*' referred to in a Pandaya inscription of the 13th century. The term means 'a sepultre or tomb lowered into the earth'. According to Srinivasan this term should be understood in the light of another Tamil term '*tāli-parambu*' meaning 'the hill containing rock-cut cells'. It is also the same as the Malayali term '*tāli-paramba*', probably, meaning rock-cut caves.[146]

Urn (*tāli*) burial are repeatedly mentioned and in some very interesting contexts. In one of the early Sangam works called *Naṟṟiṇai*, a mother, whose daughter had run away with her lover, prays to the 'powerless Lord of Death that cannot take away my life so that my body may be entomed and covered in a big dark urn.'[147] There is a verse in the *Padiṟṟupattu* which describes the cemetery as the place 'where lay the burial urn that entombed the king, was the vast exposure below the vanni tree.'[148] These references show that the urn-burial was accorded both to the kings and the commoners.

Menhirs are referred to by the term '*naḍukal*' appearing in *Tolkāppiyam*. It means 'a stone planted for the dead'. It is significant to learn from a number of references in the Sangam literature that the menhirs were decorated with garlands, shields and lances and offered liquor, etc.[149] It seems that in these practices lay the origin of the Hero-stones of later times.

Cairns are described by the term '*niṟai-kal-teṟṟi*' occuring in *Maṇimekhalai*. Here it stood for the 'mounds of heaped up stones' in a cemetery at Puhar.[150]

Stone-circle is known by the term '*kaṟkiḻai*' (*kaṟ*=stone, and *kiḻai*=circle) appearing in an inscription from Tanjore.[151]

---

145. Srinivasan, *op. cit.*, p. 12
146. *Ibid.*, pp. 10-11.
147. *Māyirum-tāli - kavippa-t, Taviṉru - kaluka - veṟ - kollâ-k-kaṟṟe*. (*Naṟṟiṇai*, 271, lines, 11-12).
148. *Mannar - maraitta tāli, vani-manṟattu-vilangiya-kâḍe* (*Pandir*, lines 22.23).
149. Srinivasan, *op. cit.*, p. 14. See also his "Some Aspects of Religion as revealed by Early Monuments and Literature of the South", *JMU*, vol. XXXII, No. 1 July (1960), p. 134.
150. Srinivasan, *op. cit.*, p. 14.
151. Aiyar, K. V. S., *Historical Sketches of the Ancient Dekkhan*, p. 359.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

As said in the beginning, it has been a bold attempt on the part of Srinivasan to quote these literary references which corroborate the archaeological evidence but for one major snag—the inscriptional references are of a very late date. Objections can also be raised against his attempts to identify cist-burials and rock-cut caves by terms which are not synonyms as suggested. It is not easily understood as to how an originally a Tamil term '*tāli-parambu*' standing for 'cists' also meant 'rock-cut caves' in Kerala where there was no scarcity of cists. And if it was originally a Malayali term for the caves, how did it change for the cists in Tamil Nadu. Similarly, probably, the term '*tāli*' has been interpreted in so many ways to suit his interpretations that one easily starts searching for the truth.

However, on the whole, the proposition is sound and shows the way for future researches since it amply corroborates the archaeological evidence.

SUMMARY AND CONCLUSIONS

Megaliths, by and large, comprise of ritualistic monuments built of huge stones, and are primarily sepulchral or religious. They are found in large numbers not only in India but also in several countries of Europe, Africa and South-East Asia. Their history goes back to the Neolithic times, and the earliest of them, located in Palestine and other areas of the Mediterranean, are dated to the last quarter of the fourth millennium B.C. Their typology consists of dolmens, cists, menhirs, stone-circles, etc. They are of different shapes and sizes ; all of them, however, did not originate in Palestine. In fact, as Glyn Daniel has observed, some of the types 'may have arisen independently in the western Mediterranean in several places, Malta for instance, and southern Spain and southern France.'[152] In India also, some of the Kerala types seem to have arisen independently.

The megaliths in India are largely concentrated in regions south of the Vindhyas, rather south of the Godavari. They are generally marked by a basic uniformity in culture-complex, observed particularly in Black-and-Red Ware pots and iron tools and weapons of characteristic shapes. Unfortunately, it is often termed as the 'Megalithic Culture.' However, since no culture expresses its ethos only in graves, and also because this complex has been first located in a habitational context of the highest antiquity at Hallur (1000 B.C.), we have termed it as the 'Hallur Culture'. We strongly feel that the Hallur Culture was of pre-megalithic origin and that it was adopted by the megalith builders on their arrival in south India. It may, however, be pointed out that within the overall uniformity of the cultural traits there are strong and significant regional variations which are often overlooked. Thus, the Coimbatore megaliths are marked by the presence of 'russet coated white painted red pots' more than by the Black-and-Red Ware. Similarly, the Nagpur megaliths are marked more by a thin micaceous

152. Daniel, *op. cit.*, p. 101.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

red ware than by Black-and-Red ware. One might, therefore, reasonably say that the Indian megaliths are associated not only with the Hallur Culture but also with the associated Coimbatore Culture, Nagpur Culture, and, perhapse, with the Malabar and North Arcot cultures as well. The picture is very hazy at the moment because the sub-stratum of all these cultures contains the Black-and-Red Ware pots. It has, however, recently been very well demonstrated in repeated laboratory tests by Majumdar that over and above the typological differences the technique of producing the black-and-red ware is not a single technique of inverted firing as is often assumed, rather it involves at least three different techniques.[153] When this pottery is more closely observed and worked out in the laboratory, it is possible that the myth of a single black-and-red ware in south India would be exploded.

The megalithic monuments in India contain fractional bones of post-exposure nature, collectively of more than one person. Although individual burials, i.e., a grave containing the skeletal remains of only one person, are sometimes associated with megaliths in Europe still, as Childe has said, the collective character of the burials should be taken as a generalized megalithic trait. In the Indian context also collective burials are predominant although single and double extended burials have been, sometimes, found. Not only that, 'false extended burial', cist with urns, and sarcophagi, etc., are also not wanting. Most of these features are frankly non-megalithic. This leads us to the principle of hybridization—the megalithic types crossing or fusing with the non-megalithic types of an earlier origin. This incidently determines the relative chronology of the monuments as also their directional changes which passed through three distinct stages, viz., The Stage of Struggle, The Stage of Adoption and the Stage of Nativization.

This has been worked out on the presumption that the real megalithic inspiration came from the west. On the present showing it appears that it came both through the western coast and the north-western passes. It has been suggested that the rock-cut caves, dolmens and cists came *primarily* through the sea route while cairn-circles and menhirs came through the land route, without, of course, implying that the sea route types had no place in the land route types and *vice versa*. Let us not forget that by 1000 B.C. most of the major megalithic types that we see in India had already been in practice in countries west of our.

Their initial date of entry into India was for long a matter of speculation. On archaeological evidence Wheeler took it to 300 B.C. and Banerjee 700 B.C. However, recent C-14 dates of the Hallur culture at Hallur, Dharwar, places the Black-and-Red ware complex, with iron artefacts, within a narrow limit of 1000-900 B.C.* This,

153. Majumdar, G. G., "The Problem of Black-and-Red Ware : A Technological Approach", *SPPMI*, pp. 90-93.

* See Appendix 1.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

incidentally, leads to another very important question regarding the introduction of iron in India. Although Wheeler took it to 500 B.C. the C-14 dates of the Swat Valley Iron Age graves (900 B.C.) and of the Painted Grey Ware levels at Atranjikhera, U.P. (1025 B.C.) and Noh, Rajasthan (800. B.C.) conclusively place it in 1000-800 B.C. bracket. Thus, the earliest date of the introduction of iron, in the north and the south both, comes to circa 1000-800 B.C. One is, therefore, forced to conclude that the iron metallurgy came to south India independent of the source which introduced it in northern India. It is not impossible because the tool typology of the two repertoires are astonishingly different. But then the question that arises is extremely significant : if in northern India the knowledge of iron metallurgy was introduced by the Swat Valley grave builders and these people did not bring this knowledge to south India, then who introduced the iron metallurgy in south India ?

It may be recalled that we have already taken the stand that on the present evidence it can safely be said that the metallurgy of iron existed at places like Hallur in the pre-Megalithic context. Obviously, even though the megalith builders might have augmented the tool-types and perfected the process of smelting and forging the metal, they cannot exclusively be given the credite of bringing in the technical know-how of iron metallurgy in south India. If so, was it the local innovation ? That does not seem possible, because of two reasons : firstly, if that were so we would have got the iron implements at some stage within the Neolithic-Chalcolithic pottery complex (with the coming of iron pottery also changes, even at Hallur), and secondly, the overall evidence in favour of iron in the Ancient World is against several independent centres of origin. It is significant to remember that with the coming of iron, entirely new culture-complexes appear on the scene, both in the north and the south. Obviously, some new impetus is behind it, although we may not be able to specify it at the moment. It is possible that the iron-smelters were the forerunners of the megalith builders ; they might have been even related to them but they themselves did not start building megaliths. *But all this, for the present, is only a hypothesis and may be discarded if on the basis of some intrinsic evidence the megalithic graves are themselves dated to 1000 B.C.* Fortunately, the tentative chronology of the Indian megaliths (800 B.C -100 A.D.) appears to overlap partly with the well documented period of the history of south India.[154] The Sangam literature, according to Srinivasan, contains traditions going back to the 3rd century B.C. He has quoted a number of references from anthologies and epics, like *Manimekhala* and *Śilpadikāram*, which were actually composed during the

154. Banerjee, N. R., *Iron Age in India*, Tables 1 to 4. See also, K. S. Ramchandran "Chronology of the Indian Megaliths, Some Considerations," *Puratattva*, No. 3, p. 109. He also favours the theory of independent introduction of iron in south India.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

middle of the first millennium A.D., but which testify to the existence of the megalihtc monuments in a much earlier context. It is an important chapter in which the archaeological and literary traditions seem to corroborate each other admirably well.

It is also a chapter in which the archaeological evidence is corroborated by the anthropological (Physical) data. Archaeologically, there seem to exist a number of cultural traits which came to India during this period and intermingled with the Indian elements, some of which have been recorded by Allchin.[155] They are supposed to have come both from Central Asia and the Mediterranean, the latter movement took place through the gulf of Amman. The studies made on the human bones from megaliths also show that besides the Proto-Australoids the megalith builders consisted of, according to the term used by S. Sarkar, the Indo-Europeans coming from northern Iran and Central Asia, and the Mediterraneans (the Dravidians) from Western regions.

It is now widely held that Megalithism had a religious bias. Whether it was an organized religion or not is a different matter and depends upon which definition of religion one adopts. It, of course, cannot be equated with Christianity or Islam or any religion in the modern sense of the term, implying the existence of a god, his representatives, a scripture, prescribed mode of salvation, etc. It was primarily a cult of the dead which is normally only one aspect of a religion. What is important to remember is simple : funerary practices form part of religion and to that extent megalithism was relegion. That, it had something to do with the cult of ancestor worship is also generally recognized. The two conclusions are based upon architectural uniformity and grandeur seen in the sepulchral megaliths all over the world. In the Indian context their placement near the irrigation tanks or on high grounds overlooking the irrigated fields, as if guarding them, is, probably, an additional ground for looking at them as something very sacred. The study of megaliths is, thus, also a study of a religion with a strong bias towards the ancestor worship.

The megalith builders got full credit from Late V. D. Krishnaswami for bringing about a green revolution in south India. According to him these people built hundreds of tanks near the catchment areas and established a chain of villages round them. This is borne out from the location of the cemeteries as also the impression of husk and rice on all types of earthen pots recovered from the graves. In this connection a 'Roman Coulter' (?) from Brahmagiri, plough-shares from Nagpur and Hyderabad sites and a large number of small iron hoes from Adichanallur, Junapani and other sites may be significantly mentioned. Although, by and large, the excavated evidence is in favour of huts and mud brick houses in the villages, at Peddabankur, District Karimnagar,

155. Allchin, *The Birth of Indian Civilization*, pp. 229-30.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Andhra Pradesh, Abdul Wheed Khan found the remains of a baked-brick structure in association with Black-and-Red Ware and iron sickles, arrowheads, a dagger, etc.[156]

The effects of this agricultural improvement was certainly felt in several other fields. With economic prosperity there occurred a phenomenal growth in population as can be judged from the number of graves in the cemeteries of even small villages. In a cemetery the number of graves runs between 200 and 300 ; each grave containing the remains of three to six individuals. A village, therefore, may have been supporting a population of 600 to 1800 people which is almost the same as to this date. The collective nature of burial in compact cemeteries is, probably, a powerful argument in favour of an organized socio-religious life of the people.

That the people quickly diffused far and wide with their superior tool technology and fast running horses is equally an important aspect of the life of the megalith builders. The amount and the variety of iron tools and weapons that one encounters in the megalithic graves is extremely impressive. Similarly, different types of horse-bits and horse face-covers coupled with the skeletal remains of domesticated horses recovered from graves are also significant.

In the process of diffusion they are, at times, likely to have come into conflict with the native people. That is made out from a large number of swords, lances and spear-heads recovered from the excavated graves. Although, it is difficult to comprehend the nature of resistence that the autochthonous folks would have offered with their far less effective weapons yet some resistence, howsoever weak, was certainly met with by the megalith builders is more than clear. That the large iron weapons were not exclusively used for chase is borne out by the fact that bones of wild animals are rarely found either in graves or habitational layers.

It is now clear that the studies in the megalithic burials have given us a great insight into an important chapter of south Indian history since the coming of the megalith builders ushered in a new era which witnessed some unprecedented changes not only in the cult of the dead and the construction of sepulchral monuments but also in the socio-economic pattern of the people. They also show that it was transitional phase between a limited agricultural economy and an intensive agro-industrial set up by the people of two strains ; one, which consisted of men who were essentially sea-faring and adventurous, and the second, which had men who were war like and nomadic. It was certainly a turning point in the socio-economic set up of the people.

156. *IAR*, 1968-69. Unpublished.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 8

THE POLEMICS

The foregoing survey of burials and cemeteries of Prehistoric and Protohistoric India has led us to some very interesting, though controversial, conclusions. We have, however, not been able to discover 'laws' supposed to be underlying all socio-religious practices, including burial practices. This is absolutely unlike Herbert Spencer who claimed to have found out in all social institutions the law of progress 'from the simple to complex and from the homogeneous to hetrogeneous'[1] as also unlike Frazer who believed that the human history could be divided into a three fold scheme of transitions, viz., 'age of magic' through an 'age of religion' to an 'age of science'[2] or even unlike Childe who asserted that the directional changes in burial customs lie in the laws of economic changes.[3] The reason is simple : it is now widely recognized that social institutions are hardly governed by 'universal laws' as such. Some time back, however, some of the over enthusiastic anthropologists gave very tempting syllogism : Science discovers "Laws" applicable without regard to time or place ; social science is science ; hence social science must discover "laws" which, like their counterparts in the exact and natural sciences must be applicable regardless of time or place.[4] But most of the writings of these authors made mention of so many exceptions to their so-called laws that they could hardly approximate the laws of any exact science. In fact, the more we study the subject the more it

1. Spencer, Herbert, *The Principles of Sociology*, vol. 1.
2. Frazer, J., *The Golden Bough*, pp. 11-60.
3. Childe, V. G., "Directional Changes in Funerary Practices During 50,000 Years", *Man* (1945), Nos. 3-4, pp. 13-18.
4. Herskovits, M. J., "The Historical Approach to Afro-American Studies : A critique", *CSA*, p. 437.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

becomes clear that social institutions cannot be equated with any phenomenon of nature guided by 'natural-laws', and they cannot be divided into absolute ages either. Thus, we shall take the evidence as it is, then try to locate the various factors inherent in the evidence (these may be sociological or economic or religious, or of any other category, but clearly identifiable) and see what do they convey in terms of changing pattern of Indian culture ; of course, with a reasonable amount of certitude. This may, however, indicate cetain social principles governing certain societies formed under certain stresses and strains. Thus, these principles will, at best, have regional applicability.

ORIGIN AND ORIGINAL BASIS OF RELIGION

The disposal of the dead in every society, howsoever primitive, has been, since time immemorial, an affair of magico-religious behaviour of the people with larger social participation : the dead body is not disposed of like the ordinary refuge of the house, although it is hardly better than that. It may, therefore, be worthwhile to consider in brief the question of the origin of 'magic and religion' for it is possible that to some extent the origin of 'magic and religion' and the origin of the careful burial of the dead body are synchronous.

Magic and religion have been described by various writers but the distinction between them has been clearly shown by Frazer and his followers under four heads: [5]

(i) Magic compels the propitiated supernatural being to do a job for which he has been commissioned by the magic practitioner. It fails to achieve the results only when some error of procedure has occurred or a stronger counter-magic has been used. But religion never guarantees results ; its use is limited to supplication, and its practitioner never resorts to coercion.

(ii) Magic has no organized 'church' or a band of traditional followers. It need not be practised in public. Clearly, while religion has communal and social aspects magic do not have them.

(iii) The utterances used in magic often get degenerated into spells and formulas, many of which have little meaning and cannot be analysed by even the best of the practitioners. The pronouncements of religion, on the other hand, are always meaningful in terms of a society's customary language.

(iv) The practitioners of magic and religion are generally set apart even in the most primitive society. While the magic men, like the Shamans, deal with all sorts of

5. Titiev, M., "A Fresh Approach to the Problem of Magic and Religion", *CAS*, p. 284.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

personal ends, often in a slightly secretive manner, the religious priests perform communal or publicly sanctioned exercises.

Mischa Titiev has, however, drawn our attention to one more feature in this connection : "In all primitive societies one set of practice involving the supernatural always takes place recurrently, and may, accordingly, be termed CALENDRICAL ; while the other set which is celebrated only intermittently, and then only when an emergency or crisis seems to have arisen, may be called CRITICAL."[6] The former are usually dealt with by the practitioners of religion while the latter are tackled by the practitioners of magic.

But following Prof. Hsu[7] it has now been widely recognized that such distinctions are not absolute, while some acts of religion may be absolutely personal, some aspects of magic may be public; it is better if we use these terms jointly.

The ethnographic literature clearly shows that in every community there is the domain of Profane and the domain of Sacred. In other words, there are no people howsoever primitive without religion and magic. It is well-known to every student of anthropology that in Taylor's opinion the essence of primitive religion is animism and that dreams provided the experiences from which man gathered the concept of his own soul as separate from his body ; and this concept man extended to the whole world arriving at animism or the beliefs in spirits.[8] Spencer believed that respect for the elder generations of one's family led to the birth of all manifestations called religion. Thus original ancestral worship was the datum of religion for him. Robertson Smith, the pioneer of religious anthropology, was of the view that primitive religion 'was essentially an affair of the community rather than of individuals.'[9] Durkheim elaborated the theory and said that religion was the outcome of crowd excitement. Over against the unexciting daily routine which he regarded as typically pursued by the individual in solitude or in small groups, he saw in group ritual, especially that connected with totemism, the original basis on which all religion has been elaborated. Religion, therefore, he says, is ultimately nothing more than society.[10] Frazer advocated in favour of fearful forces of nature, such as gale and lightning, as the first stimulants of religious thoughts.[11] In general terms, the broad historical development has been from the "rationalistic positivism" of the English intellectualists Taylor

---

6. *Ibid.*, p. 285.
7. Hsu quoted by Titiev, *Ibid.*
8. Taylor, E. B., *Primitive Culture.* vol. I, pp. 117-138.
9. Quoted by Malinowski, B., *Magic, Science and Religion*, p. 5.
10. Durkheim, E., *The Elementary Forms of Religious Life.*
11. Frazer, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and Frazer, who sought the origins of religion in the body soul dichotomy, to the sociological approach of Emile Durkheim and the French school, who concentrated *upon group goals and interests*, particularly, in their integrative aspects.

Recently, Physical anthropologists have tried to look at the problem from another angle. Some of them have questioned the capacity of the small brain of the early man, which was almost of the size of the anthropoid apes, in formulating any complex idea, such as the belief in life after death. They say that the baboons and related apes having brains of small size do not bury their dead. A little expression of one kind or the other, when an inmate dies, is only 'an automatic locomotor response' of the type called 'animal tropism' aroused by an impulse against a stimulus ; it is blind. Rensch and Altevgot compared the learning abilities of a number of related species of contrasting body and brain size and concluded that memory—a characteristic feature differentiating man from animal—is about proportional to brain size.[12] Bhalla, therefore, holds that early man like australopithecines could not have any cult of the dead, or the like.[13]

Tobias[14] as also Holloway and some others are, however, of the opinion that brain size has nothing to do with the capacity to organize a complex pattern of thinking. Not only that, Holloway has further asserted that the tool-making process itself implies the capacity of man's brain to form complex ideas. He has compared the tool-making process with the complex process of language, and he believes that both are cognitive processes and likely to have developed simultaneously and parallel to each other.[15] Childe, however, had his own doubts in the brain capacity of the Old Stone Age man. He writes : "It may be questioned whether Palaeolithic man had any articulate spoken language at all."[16] But while saying so he was, it seems, under the spell of Neoevolutionists.

Such are the varied theories on this problem and such is the chaotic disagreement amongst the scholars on the problem of the origin and the original basis of religion. I do

---

12. Rensch, B. and Altevgot, R., "Das Ausmass visueller Lernfahigkeit eines Indischen Elefanten", *Zeitschrift fur Tierpsychologie* (1955), 12 (1).
13. Bhalla, V., Comments on "A Survey of the Evidence for Intrahuman Killing in the Pleistocene" by M. K. Roper, *Current Anthropology*, vol. 10 (Oct. 1969), No. 4, pp. 450-51.
14. (a) Tobias, P. V., "Cranial capacity of Zinanthropus and other Australopithecine", *Nature*, No. 197 (1962), pp. 43-46.
    (b) -do-, "The Olduvai Bed I Homonid with special reference to its cranial capacity", *Nature*, No. 202 (1966), p. 34.
15. Holloway. R. L., "Culture : A Human Domain", *Current Anthropology*, Oct. 1969, vol. 10, 4, pp. 395-407.
16. Childe, *op. cit.*, p. 13.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

not wish to add one more theory and create more confusion. I only take the opportunity of pointing out one or two facts collected by field archaeologists and allow them to speak for themselves.

To begin with, a working definition of 'religion', or more exactly in the words of Prof. Hsu[17] 'systematized magico-religious belief' is necessary. From all that is known about the living human societies, one thing is clear : at the base of all magico-religious beliefs is the state of mind that recognizes two things : (i) there exists some extra-mundane substances (some are feared and some are loved, and still some are alternately feared and loved), and (ii) the soul or spirit or *mana* is immortal regardless of the fact that human body is mortal. In certain societies the two are taken as identical while in others they are separate. In any case, what is important to note is the reason underlying the dichotomy of spirit and body since herein lies the practice of careful burial with different elaborate rituals. The constant factor in this concept is the man's 'desire for life', as Malinowski puts it.[18] "Man's conviction of continued life is one of the supreme gifts of religion, which judges and selects the better of the two alternatives suggested by self-preservation : the hope of continued life and the fear of annihilation. The belief in spirits is the result of the belief in immortality."[19] The plethora of grave-goods found in archaeological excavations and exhibited in museums all over the world speaks in unmistakable terms that men have been believing in one way or the other in the continuity of life.

But what really exists today, even in the most primitive society, cannot completely be imposed on the past. Change is inherent in human society, howsoever slow it may be. Those who talk of the 'primitive psychology' without any regard to time and space are no more in the run. But an action without thought, except that borne out of animal instincts, such as those connected with food and sex, is inconceivable. It is true that action and thought keep on elaborating each other in time and space but whether action preceded the thought or thought preceded the action is like asking whether bird was born first or the egg. To my mind, they go together. However, for an entirely different view I would quote Childe : "We must not imagine early hominide elaborating an eschatology and then acting on it. The deep emotions aroused by the recurrent crises of life and death found expression in no abstract judgments but in passionate acts. The acts were the ideas not expressions of them. Certain types of

17. Titiev, *op. cit.*, p. 285.
18. Malinowski, *op. cit.*, p. 33.
19. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

acts came to be recognized by societies as appropriate to certain situations, just as certain types of tools won approval as standard forms."[20]

Whatever might have been the fact, one thing is certain : the Palaeolithic men took some special care and pains in disposing of their dead, a phenomenon not observed amongst the contemporary or later animals, of howsoever evolved species they were. Therefore, it could hardly be just some 'passionate acts' arising out of 'recurrent crises of life and death' ; afterall this crisis is common to animals also. This, however, does not reject 'crisis' as the original basis of 'acts' which are now categorized as 'magico-religious.' What I want to emphasize is simple : the crisis of life and death might have been a strong stimulus not only for 'passionate acts' but also for some 'active thought,' howsoever rudimentary it was. It was not impossible since, as said above, Holloway and others have clearly shown that biologically it was feasible for 'man the tool-maker' to form complex ideas, and culturally it is probable that he had some 'thought' when he carefully buried the dead body. But this 'active rudimentary thought' need not have formed a 'philosophy of life and death' ; it is likely to have formed a mode of social and personal behaviour.[21] Now the question is whether in the act of carefully burying the dead body we can determine the exact amount of passion and emotion on the one hand and reason on the other ? Probably not ; it may differ from man to man as well from society to society. The extreme cases of emotion are those in which sacro-cannibalism and mummification are practised, e.g., among the Melanesians of New Guinea who partake the flesh of the dead even at the cost of violent vomiting[22] and among the ancient Greeks, Egyptians, Central Asians, etc., who prepared mummies.[23] The extreme cases of reason are those in which the dead body is completely burnt, as amongst the Hindus. But the question is whether these are the expressions of two unrelated tendencies ? Probably not ; they arise out of two complementary tendencies : extreme reasoning will not be completely devoid of emotion and *vice versa*. In fact, human reaction towards the phenomenon of death is as mysterious as the mystery of death itself. It is always a disproportionately mixed and complex affair of emotion and reasoning, love and fear, attachment and horror—the tendencies which may seem opposite but are, in fact, complementary.

Now the question is whether the 'recurrent crises of life and death' led the Palaeolithic man only to bury the dead body carefully or also to create gods or God

---

20. Childe, *op. cit.*, p. 13.
21. Malinowski, *op. cit.*, p. 8.
22. *Ibid.*, p. 32.
23. *Dawn of Civilization*, (Ed. S. Piggot), for Greek and Egyptian practices. For Central Asian (Chinese) practices, see A. Stein's *Innermost Asia*, vol. 2, pp. 642-667.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

which may be supplicated for personal or community purposes? At the present state of our knowledge we may not be able to answer it in categorical terms. There are two reasons for it : firstly, there is hardly any archaeological evidence in the form of images in round or in painting or in any other form which could be interpreted as 'cult objects' or representations ; and secondly, ethnographic literature shows that there are some societies even today where the dead body is ceremoniously buried but there is the total absence of the cult gods, e.g., the Chono Alacaluf and Yahgan Indians of the Chillean archipelago and some of the aborigines of Australia.[24] Still the possibility of the existence of cult gods cannot completely be ruled out ; totemistic and religious ceremonies may not leave any tangible material evidence for archaeologists to pick up and identify. However, a possibility without the support of a positive material evidence is of little use to archaeologist.

As will be presently seen the archaeological evidence certainly favours an earlier beginning for the cult of the dead than for any other cult.

MOUSTERIAN BURIALS

The earliest settlements which have produced any evidence of man's actions that may even remotely be considered as magico-religious are those in the Mousterian and the allied cultures going back to 100,000 to 40,000 years. Surprisingly enough, the evidence lies only in the discovery of graves ; there being, in these settlements, no other recognizable form of magico-religious expression : sculpture, engraving, painting, etc. Human remains in the caves like Kuk-Kaba on the Crimean peninsula, el Tabun and es-Sukul on Mt. Carmel, Tashik-Tash in south-eastern Uzbekistan[25] are found in positions which clearly indicate careful, intentional and ritualistic burials ; for example, the child burial at Tashik-Tash was found distinctly demarcated and fenced with a circle of ibex-horns, and the adult burial at Shanidar was laid on a bed of flowers as has been proved on the basis of pollen analysis by Mrs. Leroi Gourhan.[26]

PREHISTORIC BURIALS : INDIAN CONTEXT

Turning to India, one does not find any marked change in the character of the evidence although the earliest known burials belong to a date much later than the late

---

24. Steward, J. H. and Faron, L. C., "Nomadic Hunters and Gatherergs", *CSA*. p. 46 ; and Stanner, W. E. H., *CSA* p. 293, respectively for the Chilean and Australian examples.
25. *Ibid.*, pp. 14-15. It gives a summary of these finds. See also, Movius, H. L., Jr. 'The Mousterian Cave of Tashik Tash, Southern Uzbekistan, Central Asia' *American School of Prehistoric Research, Bull.* No. 17, 1953, pp. 11-17.
26. Personal Communications.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Pleistocene.[27] Thus, this evidence has been located in the habitational deposits of the Late Stone Age both in the sand-dune sites of Bagor (Rajasthan) and Langhanaj (Gujarat) and the rock-shelter sites of Lekhahia and Baghai-Khor (U.P.). The evidence is also in the form of graves, there being not a single item of plastic art in the excavated remains, and the paintings on the walls of the shelters being still largely undated although a few of them may have been contemporary with the prehistoric habitation. The same is true of the neolithic site of Burzahom, Kashmir, from where only graves have been recovered as the sole proof of man's concern for the extra-mundane substances. The position hardly changes in the Neolithic-Chalcolithic sites of the Deccan and western India, as also of Bengal. No doubt, a few figurines of bulls and just a couple of female representations have been collected from nearly a dozen sites but their proportion is so microscopic in relation to the number of other antiquities as well as the graves that it is difficult to regard them as cult objects.[26] The evidence from the succeeding Hallur (megalithic) culture has also not been encouraging. The megalithic sites are found more or less completely devoid of any representation of gods and goddesses, of sacred animals and of symbols and pictures which might be termed as the cult objects. We have again to fall back upon the megalithic tombs to understand man's actions and ideas which might broadly be classified as 'magico-religious'. In this chain of evidence the only exception has been the Harappa culture, in which besides graves, representations of the Mother Goddess, Tree worship, Bull cult, etc., have been amply found, although surprisingly enough it is more true of Harappa, Mohenjodaro and Chanhudaro, i.e., the northern sites, than of Kalibangan, Lothal, Rangpur, etc., in the south. This is, probably, due to the proximity of the northern sites with the Irano-Baluchistan region where the mother-goddess and related fertility cults were prevalent in a much earlier context. It is equally possible that the Harappan fabric was created with the help of different cult-groups and those who formed the southern populations had little regard for the cults of the northern sites although the burial custom remained the same both in the north and the south. Whatever might have been the fact, one thing is clear: the Harappa Culture was based upon a thoroughly urbanized economy, and, therefore, formed, in a sense, a tangential point in the overall graph of the Indian prehistoric and protohistoric cultures which were all but urbanized.

BURIALS : A SOURCE OF RELIGIOUS HISTORY OF INDIA

Now, what does all this evidence show ? Apparently, the burials emerge as a more or less exclusive source of information for understanding the magico-religious

27. See Chapter 2, above.
28. Allchin, *The Birth of Indian Civilization*, p. 314.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

beliefs of the people. Does this also mean that there was no other form of expression of the beliefs which may be called 'religious'? It hardly means that. It is not possible that up to the Ist century A.D. the preliterate societies of India did not have any other religious cult except that expressed through the burials. As said in the beginning there seems to have been several of them but, probably, they were either in the oral form or in a form using perishable material which archaeologists cannot discover but about which literary evidence is ample. In fact, we miss many things, primarily for the Stone Age cultures, for example the mythology, which is now generally accepted as the characteristic feature of all religious thought; several rituals without which most of the religions are unthinkable; literature which grows round all religious systems. But whatever we get in the excavations is tangible and is comparatively free from confusing speculations and interpolations. Archaeologically speaking, therefore, what we can assert is what we get and not what we do not get unless the absence is proved on different circumstantial evidences. Thus we can assert only this much that in some extra-Indian contexts from the Middle Palaeolithic period onward, and in the Indian context from the Late Stone Age onwards there is a positive evidence of the cult of the dead. Further, that most of the cultures of these early periods lack in the material expression of any other cult. It is, therefore, possible that the cult of the dead was a prominent focal point round which much of the magico-religious behaviour of the people moved.

Thus, although the negative evidence may not be a positive proof for the non-existence of cults other than the cult of the dead, yet, archaeologically speaking, there is no escape from the observation recorded by Prof. Maringer: "If we ask ourselves which type of early find throws any light on primitive (i.e., prehistoric) man's religious thought and feeling, we shall see that the human skeletal remains alone provide the answer. For the stone tools and animal bones that have been found cannot tell us much more than what pertains to the economic and culinary."[29] As I said in the beginning, one might object to the use of the phrase 'religious thoughts and beliefs', but that will only be an academic objection; afterall, in the absence of a positive evidence one man's guess is as good as that of another.

DIRECTIONAL CHANGES IN BURIAL PRACTICES : A CRITIQUE

I would now like to touch upon some of the points raised by Gordon Childe in his 'Directional changes in Burial Practices'.[30] He has tried to discover, in his own

29. Maringer, J., *The gods of Prehistoric Man*, pp. 8-9.
30. Childe, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

words, 'cumulative tendencies' or *'trends in one direction* comparable to those that are clearly manifest in his (man's) material culture.'[31] He has considered the following aspects : (i) Disposal of the corpse (ii) Place of Burial (iii) Grave-goods, and (iv) Sepulchral Monuments. The validity of his thesis has been examined here in the context of the Indian evidence.

Disposal of the Corpse

Childe has quoted a number of references from the European and West Asian sites to show that although in the Stone Age both the Extended and Flexed modes of burial were in vogue, as time passed, through the Copper-Bronze and Early Iron Ages, there was a tendency to adopt extended burial in place of contracted burial.[32] It can be said that Childe was extremely selective in quoting examples. In most of the regions, and also in most of the periods, where inhumation was adopted there was the combination of both the modes. However, where it was not adopted, the preference could be given to any of the two types. In the Indian context the Late Stone Age burials at Langhanaj were contracted or flexed burials but at Lekhahia and Baghai Khor they were extended. Amongst the chalcolithic cultures of Baluchistan the position was still more complex ; apart from these two types, post-exposure (e.g., at Damb Bhuti) and post-cremation (e.g., at Mehi) practices were also followed. The neolithic site of Burzahom has also yielded both the extended and flexed burials. The Harappan cemeteries had favoured extended burial but the Post Harappan Ravi cemetery (Cemetery 'H') had both the extended and contracted burials in the lower levels and post-exposure burials in the upper levels. The Neolithic-Chalcolithic burials were mostly of infants buried in pots both in the extended and contracted forms. The adult burials, very few in number, were not only of the extended type but also of the post-exposure type (e.g., at Nagarjunakonda). The Megalithic burials were, by and large, of the post-exposure type. The complete inhumations, wherever found were, however, again of the extended or contracted types, the latter being entombed in big urns. The Swat Valley graves, in the early phase (Chalcolithic period), had the flexed burials and cremation, and in the late phase (Iron Age) post-exposure and post-cremation burials. It is not clear which of them formed a 'tendency' in the context of the theory put forward by Childe.

As said in the Introduction, burial practices are often governed by positive and negative social sanctions, that is reward for leading an ideal social life and punishment for transgressing the social laws (e.g., the Lo Doggas of Africa usually bury their dead in the village cemetery but the bodies of the sinners of suicide, murder, sexual

31. *Ibid.*, p. 13.
32. *Ibid.*, p. 13-14.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

intercourse outside human habitation, etc., are taken out of the village, kept near a water-course and then buried in haphazardly dug trenches), and, therefore, the burial practices in general are apt to be plural. Not only that, they are also regulated by magico-religious beliefs for which no laws can be formulated. They are varied and their pattern does not change in any particular predictable direction. Migrations, intermixing of different peoples, economic changes, and several similar factors also determine burial practices and it is difficult to perceive any cumulative tendencies running in a single direction through the millennia and over the continents.

Place of Burial

Childe feels that "the general tendency.....has undoubtedly been to separate graves from built up dwelling areas,"[33] i.e., the change was from the habitation burial to cemeteries. To a certain extent it is true although this tendency appeared in different regions at different times. In prehistoric India the habitation burials existed in the sites of the Late Stone Age, Neolithic period, Neolithic-Chalcolithic period and Chalcolithic period (Baluchistan). In the Neolithic-Chalcolithic period along with the habitation burials the system of opening cemeteries also started, e.g., at Nal in Baluchistan, Timargarha in the Swat Valley, and Nagarjunakonda in Andhra Pradesh, the dead were buried in regular cemeteries. It may be noted that much before this the system of cemeteries had already appeared in India with the Harappans. The Iron Age megaliths and cairn burials are found away from the habitation in regular cemeteries. Thus, apart from the Harappa culture, which is slightly tangential to the mainstream of the prehistoric cultures of India, the tendency was more or less the same as held by Childe. But it is not a law; in some parts of the world the sequence has been different.

Grave-goods

Childe believes that with the progress of civilization the grave-goods usually witnessed a comparative fall—"only a few classes, and mostly those approved by tradition from the Pleistocene, were generally regarded as suitable grave furniture."[34] The graves of the Pleistocene period included items like 'food (joints of meat) unspecialized tools or weapons (handaxes, scrapers) toilet articles (lumps of ochre) and ornaments'. By way of elaborating his point he further writes : "While the cultivation of plants was the main basis of the neolithic revolution, the instruments connected therewith (e.g., hoe-blades, sickles, querns, etc.) are seldom found in

33. *Ibid.*, p. 15.
34. *Ibid.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

graves." He says the same thing about the textile appliances and craft tools such as carpenters and smiths tools.[35]

The thesis suffers from various exceptions as also from certain debatable fundamentals. In the Indian context, the megalith builders seem to have ushered in the era of agricultural expansion in south India but there has been no dearth of agricultural implements buried in the graves. A large number of hoe-blades, sickles, bill-hooks, plough-shares, etc., have been collected from them.[36] As far as the craft tools are concerned, certainly, anvils, hammers, etc., are not found in graves but for that matter they were also not buried in the Stone Age graves. Similarly, pots were buried but not the tools which made the ornaments. There is hardly any law involved in it except simple economics, 'tool making tools' were not favoured as items of offering because they are the sources of production which one can only rarely afford to destroy. One might at best say that certain items of material culture, because of economic reasons, were usually not favoured as items of grave-offerings. This tradition, however, need not, in all cases, be traced back to the pleistocene period since it would imply unilinear development of human culture everywhere which is not viable.

Childe has also pointed out that "burial in settlements are often much less richly furnished than burials in cemeteries ; on the other hand, the evidence of offerings at the tomb is particularly clear in the case of house burials, as at Assur."[37] It is, however, again a matter of regional variation. Not only that, the study may have some validity only if a single culture resorts to both the systems, one having richer graves than the other. Further, as already pointed out richness or poverty in grave-goods is related to several factors, including politico-economic and socio-psychology. As far as India is concerned most of the prehistoric and protohistoric cultures adopted the system of house-burials, e.g., Late Stone Age, Neolithic, Neolithic-Chalcolithic cultures. Since the overall cultural milieu was poor, they are all poorly furnished. One may, however, still say that they are poorer than the cemetery burials of the Bronze Age Harappans. But then, as said above, the comparison will be faulty on methodological grounds; appropriate example if furnished by the Neolithic-Chalcolithic site of Nagarjunakonda. Here, the same people adopted both the systems but there was no differential treatment in matters of grave-offerings ; both were poorly furnished. The Indian evidence, therefore, does not support Childe's contention. As far as the cairn burials (in cemeteries) of Baluchistan are concerned, they were as poorly furnished as

35. *Ibid.*

36. Rea, A., *Catalogue of the Prehistoric Antiquities from Adichanallur and Perumbair.* See plate IV.

37. Childe, *op. cit.*, p. 15.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the house-burials, and as far as the megaliths (in cemeteries) go their richness or poverty has always been regional ; the Tamil Nadu graves yield more riches than the Madhya Pradesh ones. In India, the custom of periodical offerings on house-burials has not been attested in any of the Late Stone Age or Neolithic-Chalcolithic graves.

Childe stressed the point further by saying : "in every domain accessible to the archaeologist, with progress in civilization a dwindling proportion of society's growing wealth has been devoted to the preparation of tombs and their furnishing", excepting the graves of royalty.[38] In the Indian context the megaliths are of the Iron Age, i.e., of a late stage of progress, but still they claimed a large proportion of society's wealth and labour over erecting the huge sepulchral monuments and furnishing them with fabulously large number of bronze and iron objects, as well as the objects of gold, stone, shell, terracotta, etc. The classes of objects in the Palaeolithic times were certainly so limited in number that all or most of them could easily be accommodated in the graves. With technological progress the trend of accommodating several classes of objects persisted but when the typology started multiplying fast, it was hardly feasible to accommodate all of them—some were favoured at the cost of others. The choice was mostly determined by certain economic considerations as also by the traditions initiated by 'priests' or 'rulers' of one kind or the other. It was usually done under the cloak of beliefs. Therefore, the so called comparative poverty of the later graves in certain regions may not be a universal reality.

Some of the higher cultures in the Indian context, e.g., the Harappa culture, however, still show a really more modest furnishing of graves than those of the lower cultures, e.g., the megalithic. Childe formulates 'a general rule, for them : in an economically rich and stable society the grave-goods tend to grow relatively and even absolutely fewer and poorer as time goes on.'[39] Although he has not explained the reason underlying this phenomenon, it may be suggested that it is due to the fact that a stable society tend to develop a more sober and philosophical attitude towards the problem of life and death than a non-stable society. On the other hand, the societies whose stability is disturbed by barbaric invasions exhibit some peculiar features: the victors try to impose their personality on the vanquished by erecting huge tombs and furnishing them with the loot of the people or the new material brought by opening new channels of politico-economic contact. That explains the huge scythian tumuli of Central Asia. Such a situation, however, does not exist in the Indian context. The sociological interpretation of the grave furnishings, as held by Childe, therefore, seems to be valid only in individual regional contexts.

---

38. *Ibid.*, p. 18.
39. *Ibid.*, p. 17.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In the same category Childe has also included peaceful acculturation by a large scale migration 'that requires a radical re-organization', social and economic. He feels that migration opens 'new opportunities for acquiring wealth' and creates 'new classes (traders) who do not fit in at once into the kinship organisation of a tribe', consequently graves become rich and monumental.[40] This is, however, only partly true and again has only regional applicability. As far as India is concerned, Childe believes that the Aryans came in such large numbers that it necessitated a radical social re-organization. But then what evidence is there that the riches were showered on the graves or the funeral pyres of their dead ? In fact, the Early Vedic literature which might have belonged to the period of social readjustment, reflects a state of affairs in which the disposal of the dead was comparatively a very simple affair. The chalcolithic cultures of Baluchistan also present a situation in which large scale migrations of peoples from Iran are involved but the graves were simple and do not show the presence of any riches. The third migration may be that connected with the megalith builders. No doubt, the sepulchral monuments of these people were very imposing in India but that was hardly the result of the act of migration since building such structures was an age old tradition with the Megalith builders in the Mediterranean region.

Sepulchral Monuments

For this also Childe says the same thing : 'with the advance of material culture and consequent increase of wealth and control over nature, a diminishing proportion of social labour and energy and of individual wealth has been expended upon the construction of tombs.'[41] He also says : 'Among the civilized peoples of the Iron Age, as today, the dwelling of the living were more spacious and more sumptuous than the houses of the dead.' In other words, the Copper-Bronze Age graves were more spacious than the Iron Age graves. The comparison with the dwelling is unnecessary. The house for the dead, except that meant for royalty or for a large group of people, collectively, like the Greek Tholoi, was necessarily to be single roomed and modest in size over which not much labour or wealth could be expended. In the Indian context Childe's theory does not hold good since at no time, even in the protohistoric period, the graves were either disproportionately furnished with the individual's or society's wealth, or the sepulchral monuments were built requiring huge social labour. The megaliths form a class by themselves since the massiveness of their structure was always governed by the religious zeal and the traditions followed over thousands of years and across hundreds of geographical regions ; they were hardly governed by the laws of socio-economic and psycho-economic changes as Childe would like us to believe.

40. *Ibid.*
41. *Ibid.*

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

The Neolithic dolmens of Palestine and Europe and the Iron Age dolmens of India display many common forms, features and dimensions requiring the same amount of individual's and social wealth and labour.

The above analysis of Childe's thesis, particularly, in the Indian context, brings home one thing very clearly: there is hardly any unidirectional change in the burial practices during the last 50,000 years because the socio-religious behavioural pattern of men cannot be compared with the pattern of changes in nature or even in the items of material culture such as stone tools. There cannot be universal laws governing the changes in burial practices since underlying the changes lie not one but several factors, such as social sanctions, psychological attitude, magico-religious beliefs, economic changes, migrations, wars and acculturation. Some of his observations are, however, valid when applied to certain regions and to certain periods. It means that they have a limited validity ; the limitations imposed by time and space.

INDIAN BURIAL PRACTICES : HISTORICAL SIGNIFICANCE

We may now turn to consider the historical significance of the prehistoric and protohistoric burial practices of India.

With many people, rituals connected with the disposal of the dead have been the most important thing in the world—their habitations were flimsy but their graves were impressive. In fact, some of the cultures are almost exclusively known from the graves they have left behind. The Cemetery 'H', Swat Valley Graves, Megaliths and Cairn Burials of Baluchistan clearly establish the point since their corresponding habitations have been extremely scanty. It is quite possible that they would have remained completely unrecorded in history ; afterall, the period between 1700 B.C. and 600 B.C., i.e., from the fall of the Harappa Culture to the birth of the Buddha, had often been labelled as the 'Dark Age'. On the other hand, the cultures of the Bronze Age (the Harappa culture) and of the Neolithic-Chalcolithic period (the Jorwe culture), about which we have fairly wide knowledge from the discovery of their habitations, acquire a fuller meaning only in the light of the evidence collected from the graves. Is it not a fact that knowing simply the material culture of a people is knowing only one half of a people, i.e., the domain of the Profane, 'the other half, i.e., the domain of the Sacred remains to be known ?

Historical-geographers have often divided India into three geographical areas.[42] (1) *the area attraction*, like the Indo-Gangetic valley, which has always been attracting people from all directions because of the immense fertility of land and easy movement

42. Subbarao, B., *The Personality of India*, pp. 14-1. Also, Spate, O. H. K., *India and Pakistan : A General Regional Geography*, (London, 1954).

CC-0. Agamnigam Digital Preservation Foundation,Chandigarh

of the people for trade and commerce, (2) *the area of comparative isolation*, like the hilly regions of Baluchistan and southern Deccan, which has usually been giving shelter to many migrating peoples with limited wants and modest living, and (3) *the area of isolation*, like Chota Nagpur, NEFA, parts of Orissa, Madhya Pradesh and Andhra Pradesh, which has rarely attracted any dynamic people because of the hardships of the terrain ; it is largely the homeland of the tribal peoples.

It is, therefore, clear that at least two thirds of the history of the world is the history of migrating peoples and their 'transculturation'. Habitations provide flesh while graves provide bones, in the later case both figuratively and etymologically. While the study of the remains from the habitational deposit tells us about the changing fashions in everyday life, the study of the bones from the graves tells us about the actual peoples who affected the changes. In historical studies, peoples are as important as cultures. The migrations of the Maditerranean people and their mixing up with the Australoid people during the Late Stone Age or the coming of the Scythian people during the megalithic period in India are made out only from the study of the bones from the graves. In a sense, in historical studies, graves occupy a more advantageous position than habitations ; as a source of history they often yield more variety of objects than the habitational deposits. While habitational deposits generally yield broken potsherds, implements, ornaments, etc., graves yield complete pots, implements and ornaments as also the skeletal remains, ritual vessels, special paintings and decorations on pots, etc. Cemetery 'H' is a typical example of this type ; the graves have yielded a larger variety of objects than the habitation.

Historical studies also take into cognizance the impact of basically individual or family affair over the society. It is significant to note that the entire process of the disposal of the dead is no more confined to the bounds of the family of the deceased ; burying the dead ceremoniously has been both a family affair and a larger social concern. The house-burial sometimes might have been just a family affair but not always so. I have a feeling that in small settlements, as most of the Neolithic-Chalcolithic villages were, the disposal of the dead was a social event. It is not the mode of burial but the compactness of the habitation, economic independence of the members, social sharings, status of the dead or the family, etc., determine the obligation on the individual living members of the society to come and join the mourners. The 'Burial under Canopy' at Daimabad, the 'Four Jar Burial' at Tekkalkota, etc., are likely to have been dug in the presence of all the able bodied persons of the settlements.

A cemetery-burial on the other hand, was almost necessarily a social affair involving a large number of people for carrying the corpse to the cemetery, digging a pit, lowering the body and building some structure inside or outside the grave-pit. It is also likely to have been followed by socio-religious functions and ceremonies attended

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

by a large number of people, as it is today. It is, of course, possible that if it was the period of harvesting or of sowing the seeds, the disposal of the dead was a quick affair without disturbing the economy of the society. In some of the tribal societies, such as the Oraons of Chhota Nagpur[43] the major funerary rites, functions, feasts, etc., are shifted to 'convenient seasons', which may be after the harvests or after the rains. This is because on the one hand they do not want to disturb the working of the means of production, and on the other they want to collect something before they use up the old produce which may be too meager. It is purely an economic consideration. In the context of Indian burials, particularly, the Megaliths, it is more likely to be so since they are collective, a feature which implies 'reburial', i.e., the primary burial, the exposure of the dead body to birds and beasts, was only temporary. That applies to the common man, but when a member of the ruling (temporal or religious) family died, probably, the entire population of the settlement, even if it was a big capital town, participated in the funeral and it was some sort of a 'state mourning'. Everything came to a halt ; there did not arise any economic consideration. This is undoubtedly true of some of the Egyptian, Mesopotamian, Chinese and Greek examples, but whether the same was true of India, particularly, of the Harappan times, is difficult to say for there is hardly any burial discovered so far which could definitely be called 'royal'.

BURIALS REPRESENT THEIR TIME

Once the role of burials as an important source of Indian history is established we may proceed to examine the proposition placed in the introduction and commented upon at the end of each chapter under 'summary and conclusions': the burials and cemeteries reflect their time, i.e., as the socio-religious and economic conditions prevailing in a particular period directly affect various aspects of human life so also they affect the moral and spiritual life of the society.

From the extra-Indian evidence I would quote only two examples. The Mousterian burials in several examples are found entombing, besides the dead body, some stone tools and meat items. In caves like Tashik-Tash, Uzbekistan, U.S.S.R., the graves were intentionally surrounded, fenced and demarcated by big animal bones. Thus, the placement of the burial, the grave-goods and the grave-structure, all exhibit the socio-economic pattern of a stone-age hunting community, as the Neanderthals were. The other example is that of the pharoahs of the Age of the Pyramids of Egypt. The kings and nobles were buried in pyramids and *mastabas* with great pomp

43. *Census of India* : *1931*, pt. II, p. 2. No one is burnt between the sowing and the harvest, but only temporarily buried, to be exhumed after the harvest and then ritualistically burnt. The Taraon of Mishmis also follow the practice of re-burial. See, Verrier Elwin, *Myths of the North-East Frontier of India*, p. 277.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and show while the commoners found their last resting place in simple pits, after being wrapped in the cheapest of the leaf-mats. Do they not exhibit the autocratic rule in which there was hardly any middle class ? Does it represent not the true picture of the contemporary socio-politico-economic conditions of the country ?

We may now take up the Indian evidence and see how far the burials reflect their time.

LATE STONE AGE BURIALS

To begin with, the Late Stone Age culture was of a nomadic hunting people living either on sand-dunes or in hilly tracts. Even if only some of the paintings in the rockshelters of U.P. and Madhya Pradesh were contemporary of these people it is possible to guess from the scenes that sometimes the people were engaged in group rivalries. Similarly, the way the tools and animal bones are found scattered all over the habitation indicates that the people had hardly any sense of hygiene. On the whole, the cultural strata of these sites have not yielded any item indicating the existence of a religious cult, other than the cult of the dead. The question is whether the nomadic nature of the people is reflected in the burials ? The answer may be in the affirmative. The graves were found on the same sandy soil or rocky surface as the habitation. The dead bodies were buried within the habitation without any regard to hygiene. Several skulls at Langhnaj were found bearing marks of blows of a kind that prove intrahuman killing. Some of the burials of the Late Stone Age Bagor, Rajasthan, have yielded a few arrowheads, a thick square piece and a piece of a blade, all of copper, indicating probably the contact of the Late Stone Age people with those of the Chalcolithic sites. The placement of microliths in small groups inside the graves at Lekhahia, U.P. shows that the offerings consisted of the items of hunting and fishing. A spread of stone-chips over the skeletons at Lekhahia exhibits the performance of some definite rituals for the preservation of the dead body against all possible encroachment. All the evidence put together present a picture which is not at all different from that made out on the basis of the cultural items discovered in the habitational levels.[44] In other words, a study of the graves alone could give us a reasonably good idea about the cultural pattern of the Late Stone Stage people, even though it might not tell us anything about the habitational pattern and the houses.

HALLUR CULTURE : PENINSULAR MEGALITHS

So far we were dealing with an example about which our knowledge did not exclusively depend upon the excavation of burials. Let us, therefore, take the case of

44. See Chapter II.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the south Indian megaliths because the Hallur culture, with which they were largely associated, is still very little known independent of the graves. The evidence may be considered under the following heads : (i) Environment, (ii) Structure, (iii) Grave-goods, and (iv) Skeletal remains.

The environment of the cemeteries in which the graves were laid is generally marked by an ancient irrigation tank, cultivated paddy fields and high barren rocky ground over which the sepulchral monuments were raised. It gives an idea that the people in the past might also have been engaged in rice cultivation and tank irrigation. This is actually proved by the types of iron implements found in the graves which include a number of hoes, sickles, billhooks, plough-shares, etc.

The megalithic structures were often imposing, heavy and of well chiselled stones. This shows that they could not be built by only one or a few persons ; their construction required a large number of hands—skilled and unskilled. They were, therefore, erected either by a professional class of people round the year and this was a flourishing trade, or collectively by all the able bodied persons of the village only in certain seasons of the year when they had practically no work in the fields. That not the first but the second alternative is likely to be correct is borne out from the fact that the graves were collective in nature entombing the bones of several persons at a time. This shows that they led a collective life, buried the bones only once or twice a year when the family, class or village had already gathered the bones of several persons, and that it could not have been a very specialized profession because under such a system the workers could not have been sustained by the rest of the population throughout the year. However, structural peculiarities do imply the existence of a cadre of skilled persons, more closely concerned with the structures than the common man. This was, of course, over and above their usual agricultural or other pursuits of everyday life.

The grave goods, apart from pottery, included about forty types of iron tools, weapons, house-hold goods, ornamental pieces, etc. The objects of bronze with incised and moulded decorations and gold beads and diadems are also of more than a dozen types. Conch shells, and shell beads and discs, with incised decorations, some terracotta bulls (?), etc., have also been reported from them. These objects show on the one hand a well developed metallurgy of iron, copper and bronze, and on the other hand the agro-nomadic pattern of the life of the people because the iron artefacts include not only agricultural implements but also weapons of war and chase, e.g., lances, dirks, swords, spearheads, arrowheads. The bones of the horse, iron stirrups, horse-bits and ornamental copper-iron face-cover found in the graves strengthen the evidence in favour of the nomadic nature of the people. We can visualize that the people moved far and

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

wide on horse-back with weapons of war and chase. That they subdued the pre-existing Neolithic-Chalcolithic folk, who not only accepted the superiority of the megalith builder in material culture but also in spiritual culture, is borne out by a number of Neolithic-Chalcolithic burials which show the emergence of new elements, e.g., at Maski, in Mysore, the extended pit burials of adults within the habitation (a Neolithic-Chalcolithic practice) were found using cairn stones and stone-circles (a Megalithic practice).[45]

The skeletal remains show physical features which compare not only with those found amongst the autochthonous population of India but also with those found amongst the people who lived in Northern Iran and Central Asia (called Indo-Scythians by S. Sarkar) as also in the Mediterranean world.[46] The evidence, therefore, is in favour of migrations from these regions. It is well known, on archaeological grounds, that the tradition of megaliths originated in the Mediterranean world and then moved in different parts of the Old World, including India. The two types of evidence, therefore, corroborate each other.

On the whole, therefore, the megaliths or south India reflect their time very well and their study alone provides ample information about the associated culture as also the period.

THE KASHMIR VALLEY NEOLITHIC CULTURE

With different degrees of success, one could see different aspects of life of a people reflected in similar terms in their graves ; the limitations observed in some cases have been largely imposed by the paucity of the graves dug. Thus, the neolithic levels of the Kashmir Valley is known to have produced only ten human burials at Burzahom, six belonging to period I and four to period II. The culture, although technologically neolithic with polished stone axes, pottery, stone and bone reapers, was primarily of hunters and fishers ; the direct evidence of agriculture and domestication of animals being extremely slender. This aspect of the culture is in some way also borne out of certain features observed in the graves. The burials—extended, flexed and exposed—were laid within the habitation ; the remains of offerings included several bones of the dogs, stags, ibex, and similar other animals (some painted with red ochre, exactly in the manner the human bones were painted) ; stone pieces, ash, etc. The dog also figures in a hunting scene engraved over a flat stone, found in a trench at Burzahom.[47] All these facts remind us of the Mesolithic graves of France,

45. See Chapter IX.
46. Sen, D. K., "Observations on the Megalithic Skeletal Remains", *SPPMI*, p. 95. See Chapter 9 on 'Physical Types' by D. Raychowdhury for further discussion.
47. Pande, B. M., "Ādim Kashmir ke Gartavāsī', *Sanskriti* (Hindi) vol. III, p. 456.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

e.g , those at Maz-de Azil.[48] That the hunting aspect of the material life of the people was reflected in the spiritual life also is proved by at least eleven animal burials found laid in the same habitational area in which human burials were laid. Except probably, the dog, they include only the wild species of animals such as the wolf, Himalayan ibex, stag, sheep and goat. The ritualistic aspects of the cult of the dead emerge forcefully not only from the fact that the bones were painted with red ochre but also from a few other features, e. g., towards the ankles of a body were found two long conical stones in an inclining position ; the skull of one of the flexed burials was found with seven finished and four unfinished trepanning holes (in the opinion of De Morgen, trepanning is done to remove the fetishes and eat them ritualistically) and the body of an adult was discovered in a reclining position as if the man was 'sitting-at-ease.'[49] In the Burzahom burials, therefore, we are clearly dealing with the ethics of a primitive hunting society, quite in consonance with the material culture, that has come to light from the excavations.

CHALCOLITHIC VILLAGE COMMUNITIES OF BALUCHISTAN

A fair amount is known about the Chalcolithic Village Communities of Baluchistan from archaeological excavations. If pottery is the hall-mark of a pre-literal culture-complex (and on methodological grounds, it is so), then in Baluchistan a host of cultures exist. e. g., in six of the sites which have yielded evidence of cremation burial, at least, five cultures are involved—Mehi, Shahi Tump, Sutkagen-dor, Dabar Kot and Periano Ghundai cultures ; only Moghul Ghundai has the pottery of Periano Ghundai type. There are several other cultures whose burial practices are not known.

In Baluchistan, apart from cremation, the practice of Flexed earth burials, and of Extended, Exposed and Flexed burials in mud-brick enclosures at Kulli and Nal were in vogue. The cemeteries also give the evidence of graves carelessly cutting and recutting each other, of skeletal remains lying in a haphazard manner within earthen jars or plates or bowls ; and of grave-goods, such as copper tools and weapons, and stone and shell objects scattered all over. Over and above this, the choice of place for opening cemeteries also exhibits the same unhappy situation e.g., at Shahi Tump and Nal the ancient debris was selected for this purpose. The grave-offerings were also comparatively very poor. All this evidence taken together presents a picture which tallies well with the non-burial evidence which shows that these settlements 'comprise an assortment of cultures and local wares and throughout Baluchistan there are signs of wide spread disturbances during the 2nd millennium B. C..., the sites occupied by alien inhabitants.'[50]

---

48. Piette, E., *L' Anthropologie* vol. vi, 1895, pp. 276 ff.
49. See Chapter II.
50. Cardi, B. De, "A New Prehistoric Ware from Baluchistan", *Iraq*, vol. XIII (1951), p. 64.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The wide-spread custom of cremation in addition to other modes of the disposal of the dead body, seems to be in sequel to the alien migrations and their implied occasional infight resulting in instant deaths and quick disposal of the dead.

THE HARAPPA CULTURE

The position of the Harappa culture is slightly different. The overall directional changes of the prehistoric and protohistoric cultures in India has been from the Stage of Hunting (Late Stone Age Cultures) to the Stage of Restricted Agriculture and Pastoralism (Neolithic-Chalcolithic Cultures) leading to the Stage of Intensive Agriculture supported by developed iron metallurgy (The Hallur Culture of Megalith builders). The stage of urbanization of the Harappans can at best be called tangential. It is in this context that we should view their burial customs.

The Harappa culture was based upon a thoroughly organized civic administration with a high priority for hygiene and sanitation. With all that has been available, and has been capable of being interpreted in terms of religious cults, it is generally held that the people were the worshippers of the Mother Goddess, Water, Tree, Pipal leaf, etc., i. e., they had a well regulated spiritual culture of the folk character. The bronze and ivory toilet objects and ornaments, and beautifully shaped and painted earthen pots augmented the riches which went with the well organized life of the people. The question, therefore, is, again the same : how far all this is reflected in the Harappan burials ? Surely, they fall short of some of the western analogies where similar Bronze Stage cultures have yielded 'royal graves'—extremely elaborate and extremely rich in grave-goods, as well as with ghastly looking human sacrifices.[51] Whether the Harappans also had any king or priest king of the Egyptian or Mesopotamian type or not is unknown; at least, so far, no 'royal palace' has come to light at any Harappan site, big or small, and there is hardly any antiquity which could exclusively be called 'royal'. It may not necessarily mean that there was the system of oligarchy or democracy, but if burial goods at all reflect the social status of the buried then it can safely be said that except in a few examples where the pots or toilet objects were comparatively large in number, the status of all the persons buried in Harappan cemeteries was not extraordinarily distinguished. The 'Double' or 'Twin' burials of Lothal are, of course, rare and no generalization can be made on the basis of these graves. The excavator, S. R. Rao, saw in it the reflection of the practice of '*Sati*' which, at least in one sense, suggests the subordination of woman to man. Prof. Sankalia has, however, rightly rejected the idea, as explained earlier. The other suggestions that could be made were the 'king and queen'

51. See, *Dawn of Civilization*. It refers to these Old World cultures and the extravagant tombs. China, p. 273, Greece, pp. 225-26, South Russia, p. 320, etc.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

and 'master and servant' relationship between the two persons buried. In the absence of any distinguishing features, even in grave-goods and personal belongings, any suggestion of this nature also cannot at all be substantiated, whatever might have been the fact.

It is important to note that the unhygienic system of house-burial of the previous chalcolithic period was completely abandoned and regular cemeteries were established where people buried the dead body in neatly dug pits. The plain and painted pots, bronze mirrors, finger rings, beads, etc., accompanied the dead person in his or her grave.

The Harappan cemetery at Kalibangan, Rajasthan, is, however, important in one more respect; it probably reflects not only the regulated life of the town dwellers but also their social gradations or groupings. This suggestion is based upon the fact that within the cemetery there was some sort of segregation of at least three types of burials : the oblong pit-burials were mainly laid on the western side, the rectangular pit-burials on the eastern side while the round pit-burials with jars on the northern side of the cemetery.[52] Here, it may be pointed out, that, on the whole, the graves were moderately furnished when compared with the overall wealth of the Harappan settlements. The reasons may be several, including the missing 'royal graves,' if they were at all there, but it is possible that the emphasis was laid on other religious cults more than on the cult of the dead. It sometimes happens that when a society is stable and prosperous the conditions are conducive for the growth of subtle philosophies more than when it is unstable and at a lower stage of material growth. As a result of this shift in emphasis it is possible that burying costly items with the dead was considered legitimate although wasteful.[53]

SWAT VALLEY GRAVES

As far as the Swat Valley Graves are concerned, it is possible to say that the people who buried the dead bodies in cists, stone-circles and 'Visage' urns had come from Western Asia as their physical types, as well as pottery and other antiquities show. They introduced gold, silver and copper metallurgy in this region and they manufactured plain grey and red ware pots and terracotta figurines. After some time they received the knowledge of iron metallurgy and produced several types of implements and ornamental objects. It is during the latter period that they moved in several areas, mostly east of the Panchkora river and opened cemeteries on hill slopes, cultivated fields on river banks, and lived in houses made of rubble as is proved from the nature of the excavated debris at Timargarha.[54] Apart from these facts borne out of the material

52. Personal observations at the site.
53. See Chapter IV.
54. See Chapter VIII

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

excavated in graves and habitational areas one thing more is known, exclusively from the funerary practices : the simultaneous existence of cremation and burial (Stacul), and repeated use of a grave (Dani), i.e., first for the burial of complete inhumation or cremated bones and then after a lapse of some time for entombing the post-exposure remains.[55] From the sociological point of view, this may have far reaching implications. It may be recalled that the megalithic burials in Europe were repeatedly used over a long period and, in all probability, by those belonging to one and same clan or class or family. If this analogy has any meaning in the present context, it may reasonably be suggested that those buried in the graves belonged to one and the same clan or class of people, inspite of the fact that some were disposed of in one way and some in another. This, incidentally, also implies that plurality of burial customs was the accepted practice of the period and the region under review. But this observation does not apply to examples in which the second burial occurred during an entirely different culture-period.

In this connection the meaning of 'visage urns' may also be considered. These urns are, probably, nearest to the idea of the Palestinian (Neolithic Jericho) cult of the skulls in which the skull was plastered and the entire face re-modelled.[56] The idea in all such cases is the same—to keep the dead man's identity alive. The burial—urns, similar to these, have also been reported from a few sites of the Chalcolithic Baluchistan (e.g., Bampur). Such attempts on the part of the survivors exhibit the elaborate ritualistic designs developed by the people round the burial practices. However, since their number is limited, they may belong to the distinguished families.

Attempts have been made by A. H. Dani to correlate these people with the Early Vedic Aryans, a proposition untenable when seen in the light of the Vedic references, particularly of the *Ṛgveda*, *Atharvaveda* and *Śatapatha Brāhamaṇa*.[57] They could, however, be related in some way with the megalithic activities of Western Asia. The stone-circles, cists (in two examples with holes in sarcophagus-slabs), the post-exposure burial and the practice of collective burials are some of the traits of the Swat Valley Graves which are found closely associated with the megaliths. The middle of the 2nd millennium B.C., a date proposed for the Swat Valley Graves, clubs very well with the dates of the last phase of the megaliths in Western Asia. The proposition, however, is only provisional.

The Swat Valley Graves have, therefore, opened a long hidden chapter of the protohistory of India. Our knowledge about this chapter would have been completely

---

55. *Ibid.*, p. 25
56. Kenyon, K. M., *Archaeology in the Holy Land*, p. 52.
57. See Chapter VII

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

lop sided without these graves since more material and more facts of the socio-religious life of the people have been collected from them than from the habitational deposits at the Swat Valley Grave sites, e.g., Timargarha.

CAIRN BURIALS OF BALUCHISTAN

Our knowledge about the Iron Age cairn burials of Baluchistan also does not widen substantially from the contemporary meagre habitational deposits. Except for the flimsy evidence of a few one-room rubble quarters at Damba Koh, Baluchi Makran,[58] which are only supposed to belong to the cairn builders, nothing is known about the pattern of habitation of the cairn-builders. Our only source of information about the life of the people, therefore, lies in their burials. These burials are found in large numbers from the Zhob Valley through southern Baluchistan, Persian Makran and, probably, eastern and southern Arabia. They are simple heaps of small stones, in rare examples surrounded by a circle of slightly bigger stones than the cairn-stones. Below them, at the Zhob Valley sites, are found shallow pits containing ashes and plain red ware pots. At the Makran sites similar pits contained post-exposure bones and dull red ware pots with black paintings. The grave-goods, apart from the earthen pots (with loops for carrying cord so that they could be suspended from horse-back), contained utensils, tools and weapons made of iron, and silver, glass and precious stone ornamental objects. The number of these objects has been, however, comparatively very small.[59] In a few examples horse-bones have also been attested. The picture that emerges through all this evidence is that of a people who were on the march ; slowly and gradually, but steadily, moving from west to east and from east to north, occupying either sandy coastal regions or hilly tracts. In the process, they might have occasionally come across some resistence from the local chalcolithic people which was easily and successfully countered because of superior iron weapons and horses. By and large, they were hut-dwellers, although they might also have lived at a few places in small settlements of rubble houses. It is not known if they were effectively engaged in agricultural pursuits but looking at the painted pottery as also the number of graves in a single cemetery, ranging anywhere from two to three hundred, it can be surmised that they also had some big central villages in which life was of a sedentary nature conducive to agriculture. In each category of objects discovered—iron arrowheads, silver pieces, bronze buckle, coins, painted designs on pottery—influences from different cultures in Western Asia and Central Asia are well marked, and to that extent it may be safely held that the culture did not flourish in complete isolation ; occasional trade or cultural contacts

58. Stein, Aurel, Archaeological Reconnaissances in North-Western India and South-Eastern Iran, *Memoir, ASI.* No. 43, p. 78.

59. See Chapter VII.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

were there. The cult of the dead had two aspects : first, the sepulchral monument and, second, the disposal of the dead body. The former exhibits a marked uniformity—round or rectangular cairns—but not the latter since the dead body was disposed of in two different ways : Cremation and Exposure. The evidence clearly shows that as the people moved from the southern region to the northern, they changed their burial practice, from exposure to cremation. This change might have occurred due to acculturation in a peculiar culture contact situation since cremation was the popular mode of the disposal of the dead in this region from the preceding chalcolithic period. However, an alternative suggestion could also be made : the change over to cremation was due to the war-like conditions in the region. Instances of this type are many in European history. The point, however, need not be pressed unless, of course, it is supported by more evidence, preferably from the habitational deposits showing burning and/or desertion on a large scale.

'Cairn Burial' is a term used for a very generalized type of sepulchral monument, very simple in details and erected variously by different groups of people through human history. It assumes a specialized meaning only when the cairns are associated with a particular group of people and culture-complex. Thus, it can easily be seen that once we leave the Baluchi cairn burials and reach the cairns in the mainland of northern India, the homogeneity of the cairns is marred ; while some are absolutely sporadic, such as the Rajasthan cairns, others should necessarily be considered under different regional groups, e.g., one in the Vindhyas and the other in Saurashtra. In one way or the other their explorers have called them 'megalithic'; some (Banerjee) have related them, even generically, to the Baluchi cairns on the one hand and the south Indian megaliths on the other.[60] At the present state of our knowledge these suggestions are hard to establish since opposing views (Soundar Rajan)[61] are as good as the proposing. The reason for such divergent views is simple : the evidence from burials is meager and has rarely been much augmented from the limited excavations of the corresponding habitational sites. However, the evidences available in both the contexts are of a supplementary nature and in a way do represent their time.

THE VINDHYAN CAIRNS

Let us take the example of the Vindhyan cairns. They have been divided by the excavator, G. R. Sharma, into two groups, one belonging to the Chalcolithic period and the other to the Iron Age. The excavations of the Chalcolithic habitational mound at Kakoria in District Mirzapur reveals a picture of a village with mud houses. The

60. Banerjee, N. R., *Iron Age in India*, p. 66. Also, Leshnik, *op. cit.*

61. Soundar Rajan, K. V., "Megaliths and Black-and-Red Ware", *SPPMI*, pp. 87-89.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

economic base of the people was hunting as most of the microlithic tool types found permit us to surmise. This, in course of time, received some helpful support from restricted agriculture, pottery and copper implements.[62] The location of the explored sites shows that there was a chain of such villages all along the northern foot-hills of the Vindhyas, traversed by small tributaries of the Ganga. The graves, large in number, were found moderately built. The grave-offerings consisted of a variety of objects such as microliths, beads, tiny gold objects and a few pot-sherds. At sites like Banimillia, Bahera, Varanasi, the grave-goods was still more poor in contents, and the stone-slabs, sometimes used for erecting cists, were not very well shaped. The technological backwardness of the culture-complex is reflected in all aspects of the graves. They hardly exhibit any 'extraordinary and disproportionate expenses' either of the material wealth or the man-power of people on erecting and furnishing the tombs. The position hardly changes during the Iron Age. The cairns were similar in construction, and in richness or poverty of the grave-goods, and in the landscape in which they were erected. The only change observed has been in the material used for fabricating implements ; according to the excavator it changed from copper to iron, e.g., the graves of Kotia in District Allahabad have yielded iron adze, sickles, arrowheads, spearheads, etc. These tools, when seen in the context of the bones (recovered from the graves) which were of the domesticated animals like the pigs, sheep and cattle, do imply 'mixed economy': pastoralism supported by agriculture.[63] The habitational deposits of bones and tools also present the same picture.

THE SAURASHTRA CAIRNS

The Saurashtra cairns also tell the same story. At Amreli, the chalcolithic burials are known only from two examples of urn-burials, one containing post-cremation bones of an adult with two fragments of beaten copper and an agate microlithic point (?), and the other containing the complete skeleton of a child. There were no cairns. During the Iron Age, however, the graves entombing ashes were sealed by cairns of stones and surrounded by one to three stone-circles. The grave-goods consisted of Red Polished Ware pots (securely dated to the Ist century A.D.), shell bangles, terracotta beads and iron arrowheads and swords.[64] On all counts, they form a group by themselves but do not demonstrate features different from those observed in the Vindhyas either in the construction of graves or in their furnishing.

---

62. See Chapter VIII.
63. *Ibid.*
64. *Ibid.*

CC-0. Agamnigam Digital Preservation Foundation,Chandigarh

That is, in general, the picture which emerges from our studies of the burial customs of the prehistoric and protohistoric India. Much of it is fragmentary, controversial and full of lacunae but whatever is available has been pieced together. It emphasises favourably the central point of the thesis : burials represent their contemporary conditions, although in certain socio-cultural and economic situations higher cultures furnish their graves moderately as compared to the graves of the lower cultures. To our mind, these are the situations created by socio-economic stability and a bias for philosophizing the phenomenon of life and death and looking at the disposal of the actual dead body in a rationale way.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CHAPTER 9

PHYSICAL TYPES IN THE PRE-AND PROTO-HISTORIC POPULATION OF INDIA

A. Introduction :

The title of the chapter would seem to need some qualification in so far as I have used the words 'physical types' in preference to the more conventional or popular 'races' or 'racial types'. This has something to do with the underlying thesis that while different types of people, physically speaking, exist in India[1], they cannot be classified into a number of separate or distinct "races," as has been done by several anthropologists in the nineteenth and early twentieth centuries—the period of classical anthropology. The concept of "race" is today considered fallacious and unscientific and the only concept with any degree of scientific validity is a *genetic concept* of populations differing in the relative frequencies of some heritable unit characters ("genes")—a statistical or group concept rather than a concept of individual distinctiveness.

Different physical (morphological) types have entered into the composition of the Indian population and though these different types are discernible in different geographical regions in differing frequencies none of these types can be shown to exist as a 'pure race' or a distinct group in any geographical region or population.

1. The word 'India' in whole of this chapter has been used to refer to pre-partition India, i. e., the present Indo-Pakistan sub-continent.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The following are the principle physical types[2] discernible in the Indian population :

I. Tribal Population :
- (i) Australoid
- (ii) Mongoloid

II. Non-Tribal Population :
- (i) Mediterranean
- (ii) Western Brachycephals
  - (a) Alpinoid
  - (b) Dinaric
  - (c) Armenoid

The physical types, which will be presently defined, are not all autochthonous to India but entered into the composition of the Indian population as a result of migration of foreign hordes and invasions, some of which are historically known to us.

There is a great deal of controversy regarding the 'Aryans' in India (Thapar, 1969) but some authorities (Chatterji, 1951) seem to place their entry around 1,500 B.C. This was followed by many historical invasions. In the second century B. C., the Saka, or Scythians, a horde of pastoral nomads like the modern Turkomans, invaded the plains of Peshawar. At about the same time, the Pahlava, or the Parthians of Persia, and the Yavana, or the Greeks, invaded Western India. In the fifth century A. D., the Ephthalites, or the White Huns, mixed Turki and Mongol hordes, carried devastations over the plains of the Indus and the Ganges. As most of these invasions were in the nature of military excursions of short durations it is difficult to say how much the invaders contributed to the gene pool of the Indian population. However, the eighth century saw the beginning of muslim invasions which undoubtedly had caused serious ethnic upheaval. The muslim invasions started with the Arab invasion of Sind and continued until the establishment of the Mughal Empire in the sixteenth century. The modern Parsis of Bombay, Guha's 'Armenoid' physical type, migrated to India at the time of the Arab invasion of Persia in the eighth century A. D. By the time the Mughal Empire was established, the Portuguese had already settled in Goa, in the West Coast, the Mongolian tribes had occupied the northern mountains and the Mongolian Shans from Burma had infiltrated into Assam.

The foregoing description of the historical invasions would indicate the extent of intermixture that must have been undergone by the autochthonous inhabitants of India. The 'australoid' physical type, the 'Nishadas' of early Sanskrit literature, the

---

2. I have designated the various physical types after the terminology of Guha (1935, 1937, 1944) except that I have preferred to call Guha's 'Proto Australoid' simply 'Australoid' since the prefiix 'Proto' has the connotation of being a *prototype* which the type in question is not.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

major element in the Indian tribal population today, is in all probability the autochthonous physical type of India while the 'Palae-Mediterranean' type of Guha (the type represented by the Tamil speakers of south India) was in all probability the architect of the Indus Valley Civilization (whose beginning may very well go back to about 4,500 years from now since the mature phase has been dated by radio-carbon technique to about 2,350 B. C., vide Agrawal, 1970)

The discussion of the physical types in the pre-and protohistoric population of India will have to be limited to available evidences in the form of skeletal remains that have been unearthed either accidentally or during excavations of scores of archaeological sites all over the country. But, before we go into a discussion of the skeletal evidences, the physical types need first be defined so that we know what we are talking about. The following are the physical types in the Indian population according to Guha (1935, 1937, 1944) who provided the latest classification of the Indian peoples into what he called 'racial elements' : (Fig. 1)

1. **Negrito**—Pigmy, roundish head, infantile features, normal body proportions, deeply pigmented skin, frizzly or peppercorn hair, localized deposits of fat in the buttocks of women ('steatopygia'). This type is found in the pure state only in the Andaman Islands, represented by the Onges, the Andamanese and the Jarwas. On the mainland of India, this type was supposed by Guha to have left only traces, detectable among the Kadars and Pulayans of Kerala, and perhaps among the Irulas and some Wynaad tribes. This supposition, however, has been the subject of vehement criticism by contemporary scholars, notably Sarkar (1954, 1959) who has proved Guha's hypothesis to be wrong beyond any doubt.

2. **Australoid** (Guha called this type 'Proto-Australoid')—Stature short, skin colour approaching black, marked development of the brow ridges, sunken nasal root with broad flat nose, protruding facial portion ('prognathism'), fleshy everted lips, hair wavy to curly, closely akin to the Australian tribes, though more generalized. This type is to be met among the Chenchus, Malayans, Kurumbas and Yeruvas of South India, and among the tribals of the Munda, Santal and Kol groups, widely distributed over Central India, Bihar, Bengal and Orissa.

3. **Mongoloid**—Very scanty growth of hair on face and body, prominent cheek bones, flat face, oblique eyes with epicanthic folds, arrested development of the nasal bones. This type is subdivided by Guha into the following sub-types :

(i) *Palae-Mongoloid long-headed*—Long-headed ('dolichocephalic'), medium stature, skin colour varying from dark to light brown, short face with prominent cheek bones, feeble supra-orbital ridges, medium nose with low elevation, epicanthic fold not

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

as marked as in the Tibeto-Mongoloid, or in the Palae-Mongoloid broad-headed sub-type, occiput rounded, even bulging. This sub-type is to be found in the sub-Himalayan region, among the Naga tribes of Assam. Guha considered this sub-type as the most primitive of the mongoloid groups.

(ii) *Palae-Mongoloid broad-headed*—Broad-headed ('Brachycephalic'), short in stature, darker skin colour, rounded face, marked obliquity of eye and epicanthic fold. This type is found among the Chakma and Magh of Tripura.

(iii) *Tibeto-Mongoloid*—Tall stature, light eyes, strongly marked epicanthic fold, long and flat face, long nose with low elevation, massive head with absolute dimensions larger than those of any other living group of India. This type is to be met in Sikkim and Bhutan from where it infiltrated into the Darjeeling District of Bengal.

4. **Mediterranean**—This type is sub-divided into :

(i) *Palae-Mediterranean*—Closely resembling the ancient Proto-Egyptians this type is characterized by moderate stature, long head, slightly-built body, small but moderately broad nose, high cranial vault, proportionately longer legs, scanty body and facial hairs and deeply pigmented skin. This type can be typified by the Tamil speakers of south India.

(ii) *Mediterranean Proper*—This type is akin to the mediterr anean peoples of, Europe, characterized by medium to tall stature, long head, low head vault, arched forehead, long face, well-developed chin, narrow and prominent nose, slender body, large open eyes and arched eye-brows, particularly in women ; the skin colour varies from dark to olive brown, hair and eye colour from dark brown to brownish black. This type represents the most pervading element in the non-tribal population of northern India.

(iii) *Oriental*—This type was originally described by E. Fischer among the eastern mediterranean peoples and is popularly miscalled 'semitic'. It is distinguished from the Mediterranean Proper type by a characteristic long and convex nose. This type was detected by Guha in the Punjab, Sind and Rajasthan.

5. **Western Brachycephals**—Whereas the Mediterraneans are very widely distributed, the Western Brachycephals—the broad-headed elements—are localized in certain areas. These brachycephals are definitely not autochthonous to India but migrated from the West and, according to Guha, their route of migration can be traced from Baluchistan through Sind, Kathiwar, Gujarat, Maharashtra, Kanara, Tamilnad and Ceylon ; an easterly movement took place to the delta of Bengal through Central India, Eastern U.P. and Bihar where only traces can be found ; a third drift took place across the Indo-gangetic plain. Guha based this hypothesis on physical similarities as well as

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

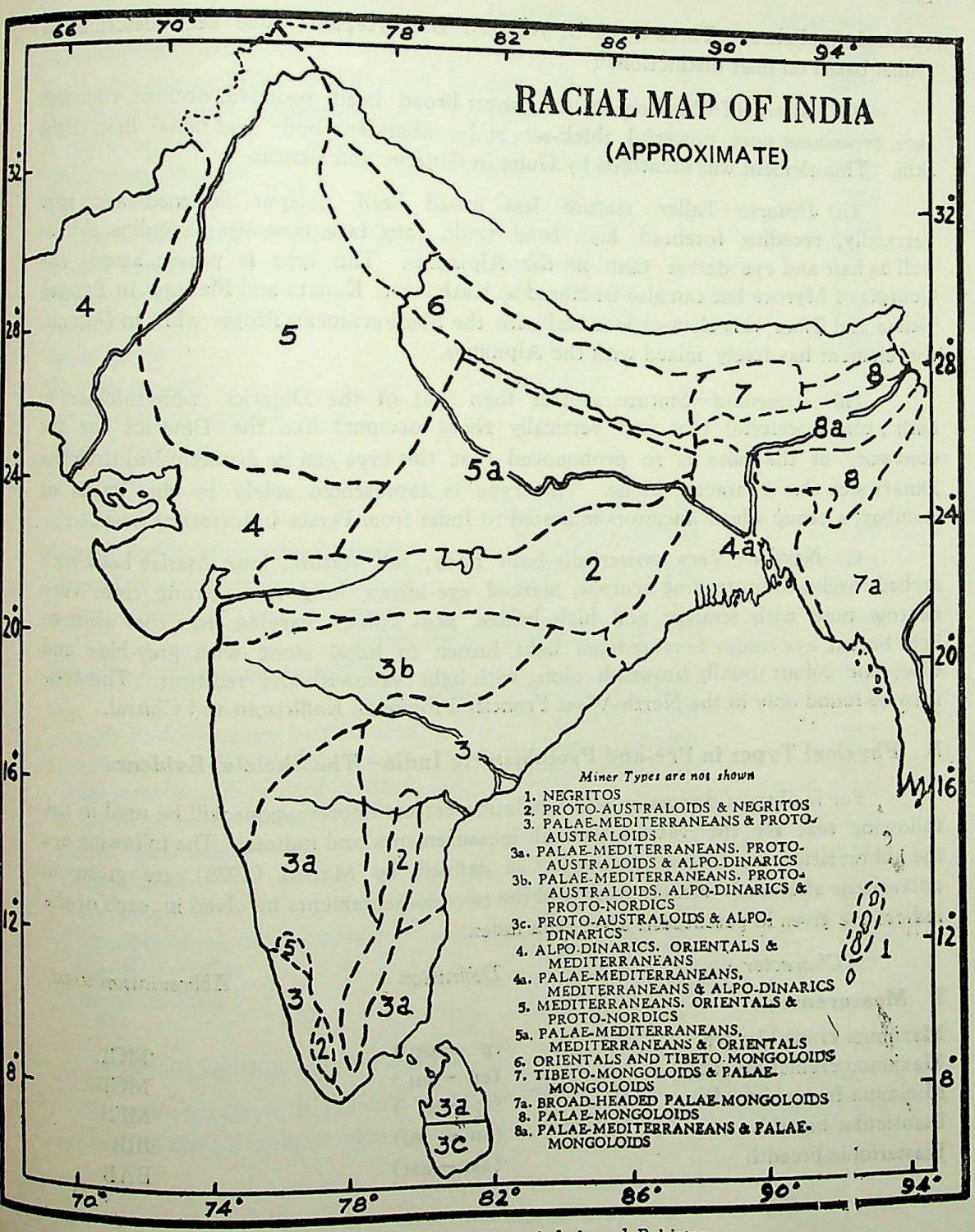


Fig. 1. Racial Map of India, Bangladesh and Pakistan.
(*After B. S. Guha*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

cultural parallelism. Three types of Western Brachycephals have been described by Guha, based on finer distinctions :

(i) *Alpinoid*—Medium stature, short broad head, rounded occiput, roundish face, prominent nose, powerful thick-set body, abundant body and facial hair, light skin. This element was identified by Guha in Gujarat and Bengal.

(ii) *Dinaric*—Taller stature less broad head, occiput flattened and rises vertically, receding forehead, high head vault, long face, nose often acquline, skin as well as hair and eye darker than in the Alpinoids. This type is purest among the Coorgis of Mysore but can also be traced in Kathiawar, Kanara and Madras. In Bengal, Orissa and Bihar, this element is mixed with the Mediterranean Proper while in Gujarat, this element has freely mixed with the Alpinoids.

(iii) *Armenoid*—Stature shorter than that of the Dinarics, more thick-set in built ; plano-occipital (flat and vertically rising occiput) like the Dinarics but the convexity of the nose is so pronounced that this type can be distinguished from the Dinarics by this character alone. This type is represented solely by the Parsis of Bombay, a group whose ancestors migrated to India from Persia in historical times.

6. **Nordic**—Very powerfully-built body, tall stature, long massive head with arched forehead, protruding occiput, marked eye-brows, long face, strong chin, very narrow nose with straight and high bridge, skin colour varying from rosy white to light brown, eye colour ranging from light brown to hazel along with grey-blue and blue, hair colour usually brownish along with light yellowish and red tints. This type is to be found only in the North-West Frontier Provinces, Kaffiristan and Chitral.

B. Physical Types in Pre-and Protohistoric India—The Skeletal Evidence

For facility of discussion and tabulation certain abbreviations will be used in the following text for the various cranial measurements and indices. The following are the abbreviations used (the landmarks, as defined by Martin (1928), are given in parenthesis after each measurement and the two measurements involved in each of the indices are given in parenthesis after each index) :

Character	*Definition*	*Abbreviation used*
I. Measurements		
Maximum cranial length	(g —op)	MCL
Maximum cranial breadth	(eu —eu)	MCB
Minimum frontal breadth	(ft —ft)	MFB
Biauricular breadth	(au — au)	BIB
Biasterionic breadth	(ast —ast)	BAB

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Character	*Definition*	*Abbreviation used*
Basi-bregmatic height	(ba —b)	BBH
Porion-bregma projected height	(po —b)	PBH
Porion-vertex projected height	(po —v)	PVH
Biorbital breadth	(ek — ek)	BOB
Bizygomatic breadth	(zy — zy)	BZB
Total facial height	(n —gn)	TFH
Upper facial height	(n —pr)	UFH
Orbital breadth	(mf —ek)	OB
Orbital height	(max. height)	OH
Nasal breadth	(max. breadth)	NB
Nasal height	(n —ns)	NH
Bigonial breadth	(go —go)	BGB
Horizontal circumference		HC
Cranial capacity		CV

II. Indices

Cranial index	(MCB/MCL)×100	CI
Length-Basibregmatic height index	(BBH/MCL)×100	LBI
Breadth-Basibregmatic height index	(BBH/MCB)×100	BBI
Length-Auricular (porion-vertex) height index	(PVH/MCL)×100	LVI
Breadth-Auricular (porion-vertex) height index	(PVH/MCB)×100	BVI
Length-Porion-bregma height index	(PBH/MCL)×100	LPI
Breadth-Porion-bregma height index	(PBH/MCB)×100	BPI
Transverse fronto-parietal index	(MFB/MCB)×100	TRI
Total facial height index	(TFH/BZB)×100	TFI
Upper facial height index	(UFH/BZB)×100	UFI
Orbital index	(OH/OB) ×100	OI
Nasal index	(NB/NH) ×100	NI
Transverse cranio-facial index	(BZB/MCB)×100	TCI
Zygo-frontal index	(MFB/BZB)×100	ZFI
Cranial modulus	$\frac{(MCL+MCB+BBH)}{3}$	CM

I. The Palaeolithic and Mesolithic :

We are as yet in the dark as to the identity of the palaeolithic peoples of India as none of the palaeolithic sites have so far produced human remains. Foote (1916)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

raised the problem of hiatus between the Palaeolithic and Neolithic cultures in the early part of this century which prompted Sankalia (1946) to initiate the first of a series of prehistoric expeditions in Gujarat in search of "Microlithic Man". Sankalia's effore was rewarded by the discovery of human remains in association with microliths and animal bones. The site is Langhnaj in the District of Mehsana, Gujarat.

1. Langhnaj : Sankalia (1946, 1955, 1965), Sankalia and Karve (1944, 1945, 1949) and Karve, Corvinus and Kennedy (1964) have published detailed reports of the archaeological expedition to Langhnaj while Ehrhardt (1960, 1963, 1964) and Ehrhardt and Kennedy (1965) have studied and reported on the skeletons. The geological age of the culture-bearing layers remains uncertain as no absolute chronology has been established nor any radio-carbon date given. The cultural evidences point to a Stone Age period prior to or at the beginning of the Neolithic. A date of about 2,500 B.C. has been proposed by Sankalia (1962 : 146) as a lower temporal limit for the site.

Altogether remains of thirteen individuals were discovered comprising two infants, one juvenile, one senile and nine adults. Of the nine adult skeletons, two have been identified as unquestionably male, three as male with some degree of certainty while the remaining skeletons could not be sexed with any degree of certainty. Ehrhardt (*op. cit.*) has published measurements on eight adult skeletons, the mean and standard deviations of which have been calculated by Cappieri (1970 : 9) as follows :

Measurement

Character	*No. of skulls*	*Mean (mm.)*	*S.D.*	*Character*	*No. of skulls*	*Mean (mm.)*	*S.D.*
MCL	8	188.8	6.2	BZB	2	137.0	1.4
MCB	8	131.8	4.6	TFH	1	114.0	
MEB	6	99.7	4.2	UFH	1	67.0	
BBH	2	125.0	7.1	OB	1	40.0	
PBH	5	110.8	7.1	OH	2	34.5	2.2
HC	4	534.8	23.2	NB	1	26.5	
BGB	4	93.3	11.2	NH	1	47.0	
CV	5	1,365 cc.	103.0				

Indices

Character	*No. of skulls*	*Mean (mm.)*	*S.D.*	*Character*	*No. of skulls*	*Mean*	*S.D.*
CI	8	69.9	3.6	UFI	1	48.5	
LBI	2	65.2	6.4	OI	1	90.0	
BBI	2	91.6	5.0	NI	1	56.4	
LPI	5	58.0	4.0	TCI	2	100.4	1.0
BPI	5	84.0	6.0	ZFI	2	76.3	2.2
TRI	6	75.6	3.4	CM	2	151.2 (mm.)	0.0

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

It may be noticed that the standard deviations of the measurements for which more than two skulls were available are pretty high indicating a great variability. Ehrhardt and Kennedy (1965 : 46), summarizing the skeletal evidences, came to the conclusion that the Langhnaj skeletons do not represent a unified group because the intra-group differences in respect of many single traits and many combinations of traits "exceed the bounds of variability within one race". However, the above authors admit that the predominant "racial elements" among the Langhnaj skeletons are "mediterranid" and "Veddid" (which should correspond to *mediterranean* and *australoid* physical types defined earlier), with the former predominating.

Inspite of the variability of the Langhnaj skeletons, certain physical features seem characteristic of the group. For example, the skull is long (185—197 mm.), very narrow (in cranial breadth), giving a low indical value (dolichocranial, even hyperdolichocranial), very low (in porion-bregma and basi-bregmatic height) as compred to the length and with an occiputal region that is drawn out or projecting in most of the cases. A protruding chin is present in all skulls with intact lower jaw. The estimated stature is tall (1670 and 1740 mm. for two males and 1580 mm for a female, according to Ehrhardt and Kennedy). The cranial capacities of four skulls are within the range of the same for European males (1,300—1,450 cc.)

Most of the above characteristics are typical of the *mediterranean* physical type while characteristics like sunken nasal root and strongly inclined forehead found by Ehrhardt and Kennedy in some of the skulls do indicate *australoid* admixture. According to the above authors, the *mediterranean* element defies sub-classification but Karve and Kurulkar's (1945) description of the skeletons as representing a type very much akin to the proto-Egyptians would seem to indicate that the mediterranean element could very well be Guha's *Palae-Mediterranean*. The tall stature, the dolichocephaly, the occipital protuberence, the slenderness of the bones, the smallness of the joints, the relatively very long lower arms and legs, as compared to the upper arms and thighs respectively, in the best preserved skeleton (No. 5) are the salient characteristics on which Karve based her opinion.

In any case, all scholars agree that the basic physical type in the prehistoric population of Langhnaj was *mediterranean** for which Ehrhardt uses Cappieri's (1962, 1969) designation "Asiatic Proto-Mediterranean." The only other element indicated with any degree of certainty is *australoid*. It is interesting to note that Ehrhardt (1963) finds a consistent affinity between the Langhnaj crania and some crania from Cemetery R-37 and Cemetery H of Harappa (Gupta *et al.*, 1962) described later.

---

* Guha's *Palae-Mediterranean* sub-type.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

also representing a population of which the basic element was *mediterranean* as we shall presently see.

As no other skeletal remains associated with microlithic culture are known from India, we may turn to the Neolithic and Chalcolithic sites. But, before we do so we will mention briefly two ancient skulls of unknown age described by Keith as early as 1917. He described two skulls, one discovered at Sialkot (Punjab) and the other at Bayana in North India, showing *mediterranean* features. Sewell and Guha (1929) also described one similar (i.e. *mediterranean* physical type) skull found among the fragmentary remains discovered at Nal (Baluchistan) on the North-West of India. The ages of all these skulls remain uncertain but Keith (1919) claimed considerable (Copper Age) for the Nal skull. A few measurements (in mm.) on the above mentioned skulls are given below :

Measurements	*Sialkot*	*Bayana*	*Nal*
	1 Male	1 Male	1 Male
MCL	180	178	188.5
MCB	128	127	132
MFB	98	90	93
BBH	140	131	146
BZB	...	136	120
UFH	...	...	72
PVH	119	108	120
NB	...	...	23
NH	...	...	49
CV (c.c.)	1,372	...	1,462

II. The Bronze Age (also called Chalcolithic)

The Bronze Age culture of the Indus Valley Civilization is usually dated to 2,500 to 1,500 B.C. on stylistic considerations and comparative studies of cultural remains. The absolute dating by radio-carbon method of the mature phase of the civilization is given as 2,300 B.C. (Agrawal, 1970). The late phase at Mohenjo-daro has been dated by radio-carbon method to 1,760±115 B. C. (Lal, 1963 : 214).

(a) Physical types represented at Mohenjo-daro : There are two published reports on the human remains excavated at Mohenjo-daro. In the first report, Sewell and Guha (1931) studied skeletal remains of twenty six individuals and identified four physical types : *Type* I or 'Proto-Australoid', *Type* II or 'Mediterranean', *Type* III or 'Mongolian branch of the Alpine stock' and *Type* IV or 'Alpine'. Type III and Type IV of Guha are not worth a serious consideration since both these types were created by him on the basis of single skulls. The main problem, therefore, concerns

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the identification and interrelationship of the Types I and II. Skulls belonging to these two types are all dolichocranial but three skulls are distinguished from the rest as Type I in view of their massiveness (mean cranial capacity—1,490 c.c.), flatness of the sides, highly arched vertex, enormous projection of the occipital region and heavy supraorbital ridges. The skulls grouped as Type II are considerably smaller (mean cranial capacity—1,332.5 c.c.) than those of Type I and not as flattened at the sides. These two types of skulls, commonly referred to as *Group* A and *Group B* skulls, compare thus :

Characters	*Group* A *skulls* (*Mean of three*)	*Group B skulls* (*Mean of six*)
CV (cc.)	1,490.00	1,332.5
CI	66.02	66.20
LVI	60.03	64.02
NI	51.06	48.20
OI	84.46	88.11

The second report on Mohenjo-daro skulls was published by Guha and Basu (1938). They studied the skeletal remains of fifteen individuals, among which only four skulls could be properly measured. Mackay (1938) regarded all these skeletons as belonging to the late period of Mohenjo-daro as there was evidence to suggest that the skeletons represented victims of a tragedy, flood or war, which might have caused the end of the civilization. This theory can be challengsd on many counts but we shall consider this outside the scope of this chapter. To return to the skulls, they are all dolichocranial, big-brained and high vaulted. Guha and Basu classified two of these skulls as 'Group A' and the rest as 'Group B', i.e, *Type I* and *Type II* respectively.

Guha and Basu, as well as Sewell, considered the Group A skulls as 'Proto-Australoid' (i.e., *australoid*) because of the possession of massive supra-orbital ridges and a typical formation of the lower forehead (bulbous) resembling that of a Papuan skull in Guha's possession. The Group B, i.e., Type II, skulls were identified as *mediterranean* (in physical type) and they compare well with the *mediterranean* skull from Nal (Baluchistan), reported by Sewell and Guha (1929), with two skulls from Anau, reported by Sergi and referred to by Sewell and Guha (1931:643), and with the *mediterranean* skulls discovered by Keith (1919) from Sialkot and Bayana, as can be seen in the following table :

Skulls	*No.*	*CI*	*LVI*	*NI*	*CV* (*cc.*)
Mohenjo-daro Gr. B	6	66.2	64.02	48.2	1,332.5
Nal	1	70.0	63.83	46.9	1,443.2
Anau	2	76.2	57.84	46.8	1,378.1
Sialkot	1	71.1	66.11	...	1,360.0
Bayana	1	71.3	60.67	...	1,250.5

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The question that arises now is whether Guha and his co-authors were justified in separating the two types (I and II) and naming them as they did. Sewell and Guha's identification of three skulls as 'Proto-Australoid' has been questioned by Keith (Guha and Basu, 1938:630) who holds that the skulls in question are 'caucasic'. Keith's contention can be supported if we compare the Mohenjo-daro Group A skulls with the *mediterranean* skulls discovered from ancient Sumer (reported by Buxton), Al'Ubaid and Ur (reported by Keith), the metric data for all of which have been tabulated by Sewell and Guha (1931) thus :

Characters	*Mohenjo-daro Gr. A*	*Al'Ubaid*	*Ur*	*Kish*
(mm.)	(3)	(5)	(3)	(3)
MCL	197	192.8	193.6	191.5
MCB	130	140.1	135.0	130.7
PVH	122	119.6	116.3	...
BZB	127	127.6	132.3	131 0
CV (cc.)	1,490	1,498.5	1,413.5	1,417.0
Indices				
CI	66.0	72.6	69.8	68.3
LVI	60.0	62.2	62.1	...
UFI	53.9	55.1	57.9	49.6
NI	51.1	49.2	48.8	44 4

Without applying statistical tests (which would not be of any significance here in view of the very small sample size in each case) one can only see a general closeness in respect of the above measurements between the four groups of skulls. Guha and Basu (1938) agreed that a comparison of the photographs of the Mohenjo-daro Group A skulls with those published by Buxton for Kish skulls and the tracings of the Al'Ubaid and Ur skulls published by Keith does indicate a close resemblance. Also, Guha and Basu accepted Keith's contention that Mohenjo-daro Group A skulls may actually be considered 'caucasic' after Guha had an occasion to examine the Al'Ubaid and Kish crania in England. The most logical conclusion, therefore, from the study of Mohenjo-daro skulls would seem to be that they represent a *mediterranean** physical type with Type I and Type II skulls at the two ends of the range of variation.

Cappieri (1970:10-13) has restudied the Mohenjo-daro skulls and finds a distinct sexual differentiation, the female skulls being typically *mediterranean* and the male skulls more robust. He considers the structural morphoarchitecture of the two (male and female) series basically the same and supports Keith's contention that even the

* Cappieri 'Asiatic Proto-Mediterranean' (Cappieri, 1966) or Guha's *Palae.Mediterranean* sub-type.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

male skulls are very similar to the *mediterranean* crania discovered at Al'Ubaid, Ur and Kish as already shown in the comparative table above. Cappieri analysed the value of the differences of means between the male and female series for 56 characters and 83.9% of them were found to be "not significant".

It is now clear that Guha's Group A and Group B skulls do not represent two distinct genotypes but sexual dimorphism of the same genotype, a type we have labelled *mediterranean.** No typical *australoid* physical type** is represented at Mohenjo-daro as originally thought by Guha *et al.* The sex-wise values of mean and standard deviation for various measurements have been calculated by Cappieri and the values of a few measurements are given below ;

Measurements (mm.)	*Sex*	*No.*	*Mean*	*S.D.*	*Indices*	*Sex*	*No.*	*Mean*	*S.D.*
MCL	M	6	191.9	7.7	CI	M	5	69.0	3.7
	F	5	179.2	5.6		F	2	69.8	0.4
	I*	11	186.1	9.1		I	7	69.2	3.2
MCB	M	5	131.6	4 3	LBI	M	3	71.8	1.9
	F	3	123.8	3.8		F	4	75.9	10.0
	I	8	128.7	5.5		I	7	74.1	4 1
MFB	M	7	93.5	5.0	BBI	M	3	105.9	5.2
	F	5	86.7	4.2		F	3	113.7	6.2
	I	12	90.7	5.7		I	6	109.8	6.8
BBH	M	3	136.8	4.5	LPI	M	6	62.3	2.7
	F	4	134.8	6.2		F	4	64.2	5.4
	I	7	135.6	5.2		I	10	63.0	3.9
PBH	M	6	120.3	4.8	BPI	M	5	92.0	4.7
	F	4	117.5	5.0		F	3	98.0	6.2
	I	10	119.2	4.8		I	8	94.3	5.6
BZB	M	3	125.0	2.6	TFI	M	3	97.4	7.5
	F	1	117.5			F	2	96.8	12.7
	I	4	123.1	4.1		I	5	97.2	8.3

* Cappieri's 'Asiatic Proto-Mediterranean' (Cappieri, 1969) or Guha's *Palae-Mediterranean* sub-type.

** A slight admixture of this type with the *mediterranean* element cannot, however, be ruled out. That *australoid* physical type actually existed in the Mohenjo-daro population has also been inferred from the sculptured representation of a girl in bronze (now displayed at National Museum, New Delhi) which suggests a typical *australoid* type of face, with full lips, bulbous forehead and broad nose.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Measurements	*Sex*	*No.*	*Mean*	*S.D.*	*Indices*	*Sex*	*No.*	*Mean*	*S.D.*
TFH	M	4	119.8	7.4	UFI	M	4	57.2	5.3
	F	2	101.2	2.2		F	1	54.5	
	I	6	113.6	11.1		I	5	56.7	4.5
UFH	M	4	72.1	5.1	OI	M	5	84.3	7.3
	F	3	60.4	3.1		F	6	89.4	3.9
	I	7	67.1	7.5		I	11	87.1	6.0
NB	M	6	24.2	1.6	NI	M	6	48.8	5.6
	F	5	21.8	2.0		F	5	46.9	3.3
	I	11	23.1	2.0		I	11	48.0	4.6
NH	M	6	48.8	3.9	TCI	M	1	94.8	
	F	5	46.6	4.2		F	2	91.3	6.7
	I	11	47.8	4.0		I	3	92.4	5.0
CV (c.c.)	M	6	147.3	36.7	ZFI	M	3	76.9	1.7
	F	5	132.0	46.6		F	2	82.6	6.4
	I	11	140.3			I	5	79.1	4.6
					CM	M	3	152.3	5.5
						F	3	143.1	2.0
						I	6	147.7	6.3

*I=Inter sex value (Mixed group)

Cappieri (1970 : 11-12) holds that the range of the S.D. values does not go beyond the fundamental rate of somatic homogeneity shown by all the "regional types of the Asian Proto-Mediterraneans" (vide Cappieri, 1969). This would mean that the Mohenjo-daro crania do not particularly show a great variability but conform to the variability of the other six branches of 'Asiatic Proto-Mediterraneans', viz. the Troad, the Anatolian, the Syro-Palestinian, the Mesopotamian, the Iranian, and the Turkmenian.

(b) **Physical types represented at Chanhu-daro** : Mackay (1943) discovered a single skull at Chanhu-daro which has been described by Krogman and Sassaman (Mackay, 1943 : 252-263). They have tried to advance a theory of a complicated series of admixture (with the 'Proto-Mediterranean') on the basis of this single skull to the point of being ridiculous. We shall refrain from discussing their interpretation but note the values of a few important measurements :

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Measurements (mm.)	*Value*	*Indices*	*Value*
MCL	178.0	CI	71.1
MCB	126.5	LBI	69.1
MFB	97.0	BBI	97.2
BBH	123.0	LPI	60.7
PBH	108.0	BPI	85.3
BZB	124.0	UFI	49.0
UFH	61.0	TCI	98.0
NB	25.0	ZFI	78.2
NH	48.5	CM	142.5
CV (c.c.)	1222	NI	51.6

(c) **Physical types represented at Harappa** : The skeletons discovered at Harappa come from various sites, viz. Cemetety H (open and pot burials), Cemetery R-37, Mound Area AB, and Area G-289 of which Cemetery R-37 represents the oldest inhabitants and the pot burials of Cemetery H, the latest. Altogether, skeletal remains of 260 individuals are known from the above sites of which only 167 have been identified as adults.

Human remains discovered from Cemetery H were first studied by Guha (Vats, 1940 : 238). The skeletons come from both pot burials (stratum I) and open earth burials (stratum II). The evidence of two different methods of disposal of the dead in the two strata of Cemetery H, according to Vats, meant the arrival of a new group of people with different funerary customs. According to Guha, the skeletons of stratum II (open burials) represent a large-brained dolichocephalic people with well-developed supra-orbital ridges, high cranial vault, long face and prominent nose, not unlike the type represented by the Group A skulls of Mahenjo-daro. In the stratum I (pot burials) there is a clear indication of an admixture of the above type with a small, low-headed type, as can be seen among the present aboriginal population of India.

In a report published by the Anthropological Survey of India, Gupta, Datta & Basu (1962) studied well-preserved skeletons of 86 individuals belonging to the four sites mentioned earlier. They identified four basic physical types which are as follows :

1. **Type A**—This type is indicated by 21 adult skulls from Cemetery R-37 and a single skull from Cemetery H. The type is characterized by large, strongly musculatured skulls, having low receding forehead, pronounced supra-orbital ridges, relatively low rectangular orbits, broad nose, low or medium upper face, prominent occipital protuberance and rather broad cheek bones. The mean indical values of the male skulls of this type are as follows : CI=71.2 (dolichocranic) ; LVI=60 8 (orthocranic) ; UFI=51.9 (mesen face) ; NI=51.6 (chamaerrhine). The estimated male stature of

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Type A at R-37 Cemetery, according to Pearson's formula, is 1,743.8 mm., that according to the formula of Dupertuis & Hadden, 1,797.1 mm.

Skulls belonging to this type seem to be comparable to the Group A skulls of Mohenjo-daro. Five skulls belonging to this type (from Cemetery R-37) have further been distinguished as differing from the rest in possessing very strong muscle impressions, slightly acquiline nose, narrow nasal aperture, comparatively narrow face and a tendency toward sagittal keeling of the vault. Gupta *et al* have suggested that, though all the skulls of Type A should be treated as one single group, the above mentioned five skulls may be attributed to the 'Proto-nordic' type, as opposed to the rest of the skulls which can be designated 'Pseudo-Australoid'.

B. K. Chatterjee and G. D. Kumar who, in supplement to their publication (1961), have published (undated) "Comparative study and racial analysis of the human remains of Indus Valley Civilization with particular reference to Harappa", also identify the Type A skulls of Harappa as partly belonging to a "proto-nordic" type and partly to a less rugged variety with comparatively finer features.

2. **Type A1**—This type is represented by ten adult skulls at R-37, five adult skulls at Area G-289, one adult skull at Mound Area AB and three adult skulls at Cemetery H. These skulls are also dolichocranial but are smoother, finer and weaker in structure as compared to the Type A skulls. The muscle impressions are feeble, forehead steep, glabella region smoother, nose medium and nasal depression shallow. The mean indical values for one group of Type A1 male skulls from Cemetery R-37 are as follows : CI=70.4 (dolichocranic) ; LVI=63.1 (hypsicranic) ; UFI=56.1 (lepten face) ; NI=49.7 (mesorrhine). The estimated male stature at Cemetery R-37, according to Pearson's formula, is 1,665.7 mm., that according to the formula of Dupertuis and Hadden, 1,711.7 mm.

Chatterjee and Kumar (undated) have also identified this type which seems to be comparable to the *mediterranean* type of skulls (Group B) discovered at Mohenjo-daro.

Nine female skulls belonging to the Stratum I of Cemetery H have been designated Type A2 by Gupta *et al* and attributed to a "smaller form of Classic Mediterraneans."

3. **Types B1 and B2**—The B1 type, identified from five adult skulls at Area G-289, and the B2 type, identified from seven adult skulls (two from the jar burials and five from the open burials) at Cemetery H, are, according to Gupta *et al*, the two variants of a round-headed 'Alpine' element. The characteristic features of all these skulls are really the same but the B2 skulls are larger in size and have a more receding

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

forehead, compared to the B1 skulls. These skulls compare favourably with the round-headed 'Alpine' skulls from Hissar III.

4. An 'Armenoid' element, indicated by a single male cranium from Mound Area AB. This cranium has pronounced, and almost continuous, brow-ridges, receding forehead, very fine nose, a high cranial vault rising to an apex at the crown and a characteristic 'armenoid' type of flattened occiput. This type has also been identified by Chatterjee and Kumar.

Having been acquainted with the Harappan materials let us now try to find out what inferences regarding the physical types can we really draw from these materials. According to Gupta *et al*, the population of the mature Harappan culture (Cemetery R-37) comprised two basic physical types. Both were dolichocranial but while one type (A) was tall, rugged, sturdy-built, with pronounced eye-brow ridges, receding forehead and broad nose (with depressed root) the other (A1) was gracile, shorter, finer and weakly built. We can see that here too we are faced with the same problem that we confronted at Mohenjo-daro. The question that arises is: Do Types A and A1 of Gupta *et al* actually represent two physical types in the population or merely are the two extremities of a range of variation? The suggestion of Gupta *et al* that five skulls of Type A could be considered 'Proto-nordic' and the rest, 'Pseudo-australoid' seems to contradict their own statement that all the skulls of Type A should be treated as one single group. In any case, the estimated mean stature of Type A is far above the maximum stature of any known 'Proto-australoid' (i.e. *australoid*) tribe of India. Type A1 of Harappa looks very similar to the Group B skulls of Mohenjo-daro, according to Gupta *et al's* own admission, while Type A skulls come close to the Group B skulls of Mohenjo-daro. It would, therefore, seem that there is some consistency in the materials discovered at Mohenjo-daro and Harappa and we may agree with the generally accepted idea that the same type of people comprised the population of Harappa and Mohenjo-daro, the twin cities of the Indus Valley Civilization. In all probability, therefore, Type A1 skulls of Harappa represent the physical type which we have earlier called *mediterranean** (vide Guha's definition on page 4 (i)) and which represents the most pervading element in the population of south India today. The Type A skulls, like the Group A skulls of Mohenjo-daro, present some problems. There are two points of significance, however: Type A is more heterogenous than Type A1 (which prompted Gupta *et al* to subdivide the former) and some of the Type A skulls present characteristics, like low receding forehead, broad nose, prominent supra-orbital ridges and strong occipital protuberance, which are those commonly met in the skulls of *australoid* tribes of India. Further, Sarkar (1964:84)

* Palae-Mediterranean sub-type.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

quotes Martin to suggest that a high frequency of the perforation of the olecranon fossa of the humerus points to a 'Veddid' (i.e. *australoid)* affinity since this characteristic feature occurs in the high frequency of 58% among the Vedda tribe of Ceylon—a typical *australoid* physical type. According to Gupta *et al*, the percentage frequency of the perforation of the olecranon fossa of humerus goes as high as 9.6 in the open burials of Cemetery H. In all probability, therefore, the Type A skulls of Harappa, as well as the Group A skulls of Mohenjo-daro, represent a *mediterranean* population with some degree of *australoid* admixture.

Sex-wise values of mean and S.D. for various measurements have been calculated by Cappieri (1970:33) for the Harappa crania as well and the values of a few measurements are given below :

Measurements (mm.)	*Sex*	*No.*	*Mean*	*S.D.*	*Indices*	*Sex*	*No.*	*Mean*	*S.D.*
MCL	M	30	186.1	5.9	CI	M	28	73.7	4.0
	F	33	179.1	7.0		F	26	73.8	4.0
	I*	63	182.5	6.5		I	54	73.7	3.9
MCB	M	28	136.8	6.1	LBI	M	27	72.2	3.2
	F	27	131.1	5.7		F	21	72.0	3.5
	I	55	134.0	5.8		I	48	72.1	3.3
MFB	M	27	96.4	4.4	BBI	M	26	98.1	4.9
	F	35	91.9	4.6		F	22	98.9	5.6
	I	62	93.8	4.9		I	48	98.5	5.2
BBH	M	28	134.1	4 1	LPI	M	23	62.2	2.4
	F	26	127.7	6.1		F	24	61 5	2.2
	I	54	131.0	5 1		I	47	61.8	5.2
PVH	M	23	115.5	3 1	BPI	M	23	84 8	3.3
	F	27	109.8	4 6		F	23	84.1	3.6
	I	50	112.4	3.9		I	46	84.4	3.4
BZB	M	15	131.8	5.7	UFI	M	15	51.4	4.1
	F	16	121.4	5.0		F	12	52.6	3.0
	I	31	126.4	5.2		I	27	51.9	3.6
UFH	M	27	69.1	4.1	TCI	M	15	95.7	4.2
	F	26	64.0	4.6		F	11	93.2	5.5
	I	53	66.6	4.4		I	26	94.6	4.9

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Measurements (mm.)	*Sex*	*No.*	*Mean*	*S.D.*	*Indices*	*Sex*	*No.*	*Mean*	*S.D.*
NB	M	28	26.2	2.1	ZFI	M	14	73.3	4.3
	F	33	24.5	1.8		F	14	74.8	2.8
	I	61	25.3	1.9		I	28	74.1	3.6
NH	M	29	51.8	2.9	CM	M	26	152.5	3.4
	F	35	46.6	4.4		F	20	145.5	3.2
	I	64	48.9	3.7		I	46	149.5	6.4
CV (c. c.)	M	26	140.6	61.5	NI	M	27	50.5	3.9
	F	24	125.8	94.4		F	32	52.6	5.0
	I	50	133.2			I	59	51.7	4.5

* I-Inter-sex (mixed group)

Not considering the single skull which Gupta *et al* called 'Armenoid', we certainly seem to find a broad-headed element in Harappa, called 'Alpine' by Gupta *et al* and 'Alpo-Dinaric' by Chatterjee and Kumar. This element, however, did not form a section of the basic population as it was absent from the Cemetery R-37—which represents the oldest inhabitants—inspite of the large number of skeletons discovered at this site. There seems to be a general agreement in supposing that Types A and A-1 represent the basic population of the Indus Valley Civilization while the broad-headed 'Alpine' element could represent either later comers or extraneous elements in the population.

Sarkar, following Fischer (1921), Morant (1928), and Kappers (1934), puts a great emphasis on the importance of the length-breadth index (Cranial Index) in differentiating physical types. *Fig.* 2 shows the frequency curves of the cranial indices of the Harappan skulls, after Sarkar (1964). The bottom curve shows the distribution of the cranial index of twentynine crania (unbroken line) from Cemetery R-37 (twenty-seven described by Gupta *et al* and two described by Wheeler, 1947) and of five crania from Stratum II (open burials) which has been designated H-II. The broken line represents Wheeler's data which give slightly different cranial indices than those given by Gupta *et al* (who probably worked after the skulls have shrunk to some extent). We can see Wheeler's curve (which Sarkar takes to be more authentic) shows the highest peak at the 71 index level. The middle curve is a curve of the combined R-37 and H-II skulls (total=34). The black dots in the middle curve represent the positions of the skulls from the jar burials (i.e. stratum I) of Cemetery H, designated H-I. It will be noticed that this combined curve also has the peak at the 71 index level. The curve at the top shows the distribution of cranial index (length-breadth index) of the skulls from H-I. Notwithstanding the slight deviation due to Wheeler's different indices, the peak of the curve is very clearly at the 76 index.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

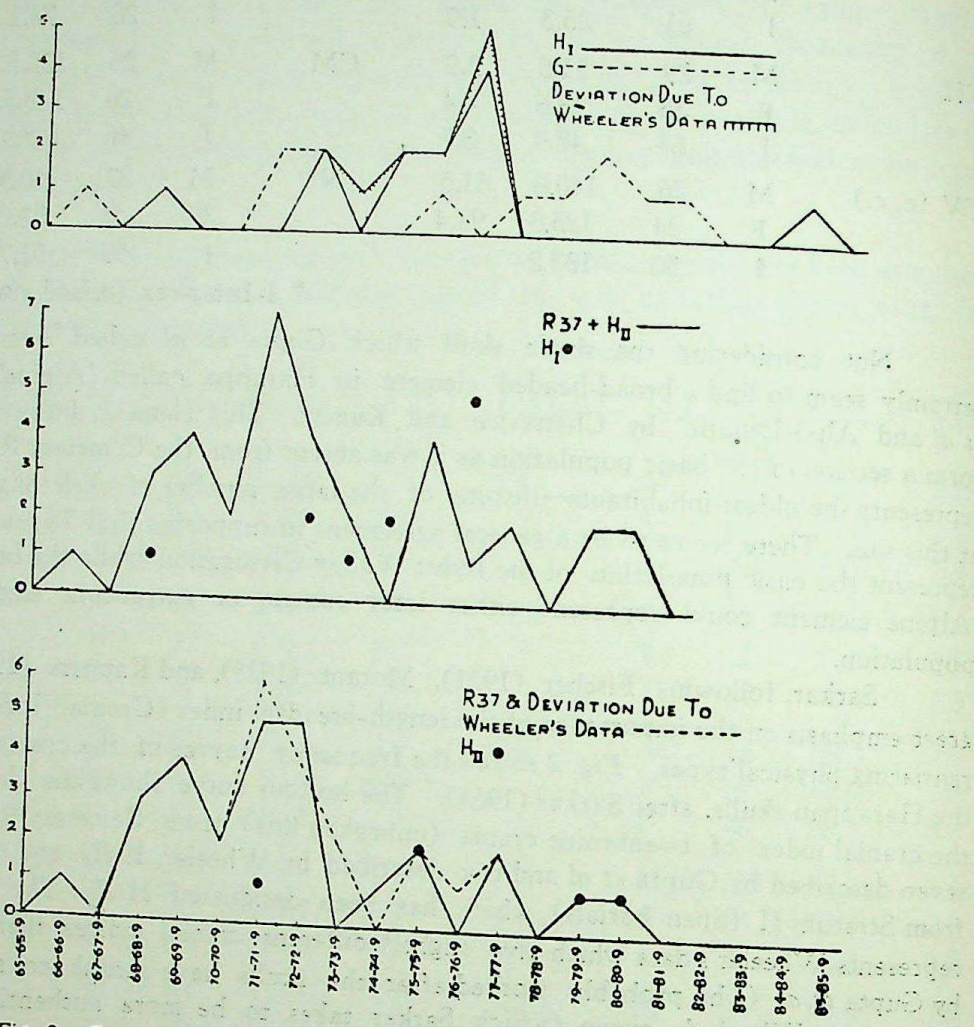


Fig. 2. Frequency distribution curves of cranial indices of Harappa skulls. (*After S. S. Sarkar*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

On the basis of these curves, Sarkar (1964) suggests that we are dealing with three populations at Harappa : (a) a 71-cranial index people, predominantly represented by the population of Cemetery R-37, (b) a 79-cranial index people, represented at Stratum II (open burials) of Cemetery H (which can be noticed both in the bottom and in the middle curve) and (c) a 76-cranial index people, represented by the population of the jar burials of Cemetery H.

According to Kappers (1934), the 71 cranial index people are the 'Indo-Aryans' as represented in Tepe Hissar and in the Chuhra of Punjab. Sarkar's frequency distribution curves of cranial indices of Tepe Hissar, Chuhra, Harappa and other Indus Valley skulls are reproduced in Fig. 3 for reference. All these curves show a general agreement indicating that we are perhaps dealing with the same dolichocephalic people in each case.

The 76-cranial index people are represented solely by the skulls of the jar burials of Cemetery H. As Cemetery 'H' represents a post-Harappan culture, the presence of a mesocranial element, which is absent in R-37, may represent a later arrival of a mesocranial people and the same can be said of the brachycephalic 79-index people of the open burials of Cemetery 'H'. It is difficult to say, however, whether the 76-index people and the 79-index people were really two different ethnic groups, as Sarkar apparently believes, or they lie within the range of variation of one and the same meso-brachycephalic group. We shall take up the question of variability within and among groups in the Bronze Age-cum-Chalcolithic period of western India after describing skeletal remains from 3 more sites—Lothal, Nevasa and Chandoli.

(d) *Physical types represented at Lothal* : Lothal is a Bronze Age Harappan site in the Ahmedabad district of Gujarat. The early phase at Lothal represents the mature phase of Harappa culture and has been dated to 2,450-1,950 B. C. (Rao, 1963 : 181) but it may be bracketed between 2,100 and 1,900 B.C. in view of the C^{14} dates. Lothal B, or the late phase, is a degenerate phase and has been dated to 1,900-1,400 B.C. (Rao, *ibid.*). Chatterjee and Kumar (1963) have reported on the skeletons and identify three physical types : (i) a large and rugged long-headed 'Proto-Nordic' type with high cranial vault, strong supra-orbital ridges and comparatively long and narrow face akin to the 'Proto-Nordic' type described at Harappa ; (ii) a long-headed but smaller and smoother 'mediterranean' type with well-arched cranium and protruding occiput similar to the *mediterranean* type described at Harappa, and (iii) a broad-headed 'Alpino-Armenoid' type, as was also described at Harappa, associated with vertical and flattened occiput and long convex nose. The inter-sex value of the means and standard deviation of the Lothal crania, as calculated by Cappieri (1970 : 10) are given below :

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

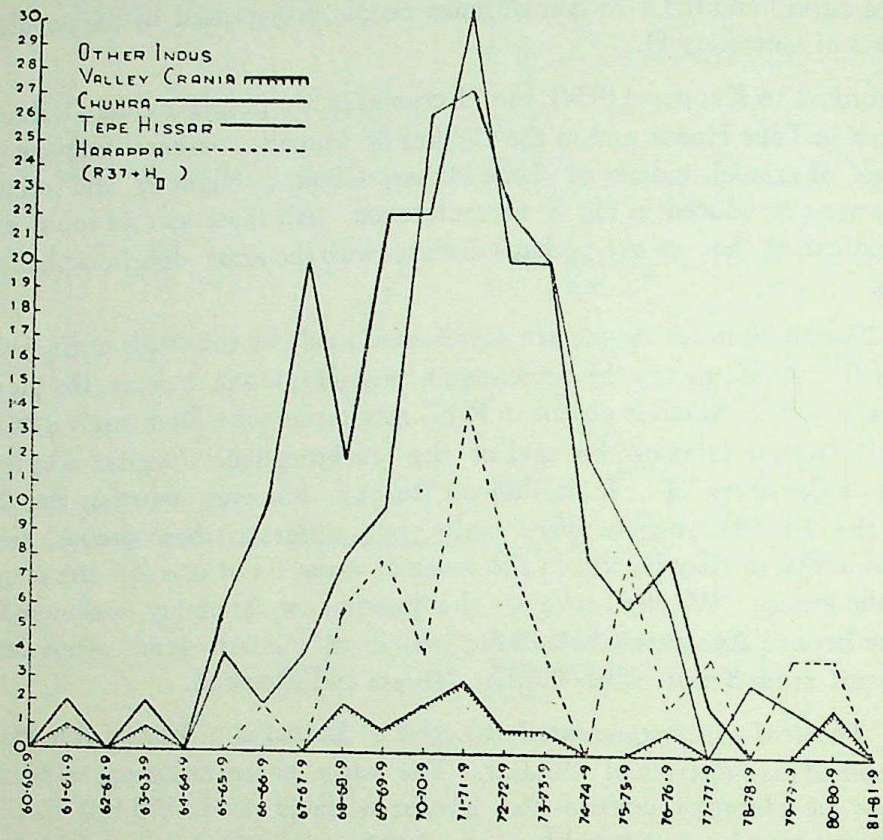
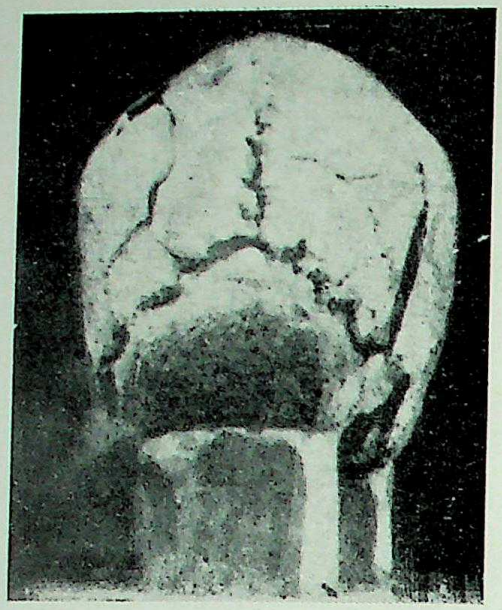
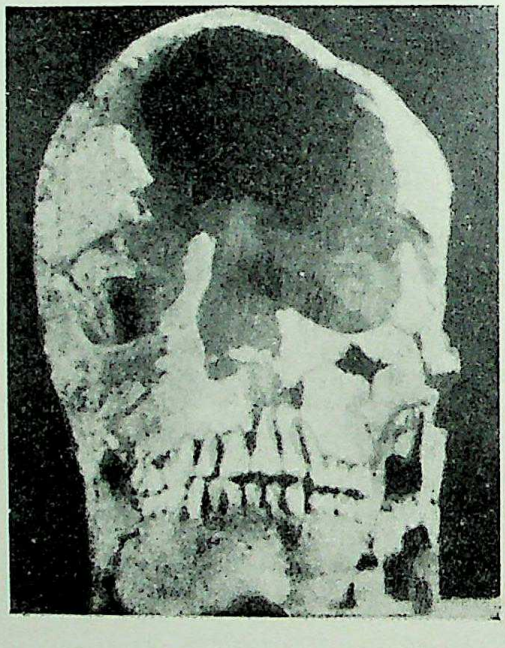


Fig. 3. Frequency distribution curves of cranial indices of Harappa, Tepe Hissar, Chuhra and other Indus Valley crania (*After S. S. Sarkar*)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh





Three views of a cranium from a chalcolithic urn burial excavated at Nevasa (See page 291)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Measurements (mm.)	*No.*	*Mean*	*S.D.*	*Indices*	*No.*	*Mean*	*S.D.*
MCL	8	187.9	9.2	CI	6	76.9	4.0
MCB	8	142 4	11.3	LBI	4	70.5	3.4
MFB	7	101.1	4.4	BBI	4	100.6	14.3
BBH	3	136.0	10.6	LPI	7	62.2	5.3
PBH	8	121.4	11.9	BPI	8	83.9	16.2
BZB	2	131.0	4.2	N1	6	56.8	4.4
TFH	4	112.5	5.0	TFI	2	84.0	2.8
UFH	6	66.3	3.5	UFI	2	48.1	1.4
NB	6	26.0	2.0	TCI	2	90.4	3.6
NH	6	45.8	5.5	ZFI	2	79.4	1.0
BGB	4	81.3	11.6	CM	3	157.8	5.3
CV (c.c.)	8	158.1					

(e) *Physical types represented at Nevasa* : Kennedy & Malhotra (1966) have published a detailed report on the human skeletal remains from the chalcolithic* site of Nevasa, in the district of Ahmednagar, Maharashtra. The details of the excavation are available in another comprehensive report (Sankalia, 1960).

Excluding a specimen (No. 49) from the Indo-Roman level (which we are not considering at the present moment), only three adult crania (2 females and 1 male) were in a condition fit for measurements though all the measurements were not possible on all the crania. The mean values, with S.D. where applicable, of a few measurements and indices are given below :

Measurements (mm.)	*No.*	*Mean*	*S.D.*	*Indices*	*No.*	*Mean*	*S.D.*
MCL	2	179.5	7.8	CI	2	74.2	2.4
MCB	2	133.0	1.4	LBI	1	72.4	
MFB	2	101.5	13.5	BBI	1	100.0	
BBH	1	134.0		LPI	3	66.1	4.5
PBH	2	114.5	0.7	BPI	2	86.1	1.4
PVH	1	123.0		NI	2	51.6	1.0
BZB	1	125.0		TFI	1	92.8	
TFH	3	110.7	5.5	UFI	1	53.6	
UFH	3	63.7	3.5	TCI	1	93.3	
NB	2	24.5	1.0	ZFI	1	88.8	
NH	3	46.3	2.1	CM	1	151.0	
BGB	3	101.0	1.7				
CV (c.c.)	2	1313.0	36.0				

* The result of dating one sample by radio-carbon method gives the absolute age of 2545 ± 115 to 3106 ± 122 years, or 586 to 1147 B. C. The Nevasa chalcolithic is usually placed in circa 1500-1000 B. C.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stature was estimated by four different formulae and the mean values for the two female specimens are 1649.3 and 1571.9 mm., the mean value for the male being 1687 0.

On a comparison of the morphological features of the Nevasa chalcolithic specimens with those of other prehistoric series, Kennedy & Malhotra (1966) find that the Nevasa crania are closest to the Harappan R-37 crania. These two series are very close with regard to the size and form of frontal bone, the degree of nasal depression, the degree of mastoid development, the degree of reduction of temporal fullness, and pronounced supra-orbital torus in the males, besides the closeness of metric character means. The two series do differ, however, in respect of occipital protrusion, being much less in the Nevasa series.

Of the 34 adult crania of the Harappa R-37 series, with which the Nevasa series was compared, we may recall that 21 belonged to the *Type A* and 10 to the *Type A* of Gupta, Datta & Basu (1962). We may further recall that earlier we have come to the conclusion that while *Type A* may be considered a *mediterranean* physical type (of Guha's definition), *Type A* may at best be considered a *mediterranean* physical type with *australoid* admixture. On the basis of this comparison, therefore, we may agree with the conclusion of Kennedy & Malhotra (1966 : 120) that the predominant element in the Nevasa crania is *mediterranean* and a second element may be identified as *australoid*.

(f) *Physical types represented at Chandoli* : The chalcolithic site of Chandoli is situated about 114 miles south west of Nevasa. Skeletons of several individuals have been unearthed but only one individual can be identified as an adult. Malhotra (1963, 1965) reported on the skeleton (male) and some of the measurements are given below :

Measurements	*Mean (mm)*	*Indices*	*Mean*
MCL	197	CI	65
MCB	128	LPI	63.4
MFB	81	BPI	98.4
PVH	126		
BGB	92		
CV	1519 c.c.		

The 'Bronze Age—Chalcolithic' period : physical types and their variability

From what we have discussed above, it becomes rather clear that the broad morphological types represented in the various Bronze Age—Chalcolithic period skeletal samples, or populations, known to us so far, are not many and can, for a general theory,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

actually be pinned down to two basic types—the predominant *mediterranean** type and a secondary *australoid* type which appear to have under-gone admixture with the former. The degree of admixture must have varied in varying localities and is certainly more evident among the Nevasians than in the Indus Valley where a *mediterranean* type without *australoid* admixture can be identified at every site. What is more important to note is that while the *mediterranean-australoid complex* of Nevasa, Lothal and the Indus Valley has persisted in the tribal populations of the respective regions, through the 4,500 years since Bronze Age—Chalcolithic culture, the *mediterranean* type *per se* has persisted in the urban and rural populations only. The fact of this continuity of the physical types has been observed both by Kennedy & Malhotra (1966:120) and Gupta, Datta & Basu (1962:179).

Cappieri (1970:14-25) has made a study of the variability of the Bronze Age—Chalcolithic crania, both intra-group and inter-group variability. The one most important conclusion that has been brought out by his study is the fact that there exists a great degree of somatic homogeneity in the total series of Bronze Age—Chalcolithic crania. The variability, which undoubtedly exists, is not statistically significant in terms of the sigma-test as 98% of all metric values fall within the limits of ± 3 S.D. (standard deviation) around the mean of the pooled series of 103 crania. In fact, of the total 65 metric values considered, 62 fall within the limits of ± 2 S.D.

The highest intra-group variability is shown by the skeletal population of Lothal (index of somatic variability=6.5) and the least by that of Harappa (index=4.4). Mohenjo-daro population shows an index of 5.0.

The inter-group variability has been tested by an analysis of the significance of the difference between means. We reproduce in the following page a table from Cappieri (1970:18) showing, "in whole figures, the inter-sex differences of mean for the 11 essential characters concerning the 'Local Varieties' arranged in all possible mutual permutations." Eleven essential characters are considered and most of the differences between means (in 83.4% cases) are not statistically significant, pointing to a high degree of somatic homogeneity. It is important to know that nasal height, which is considered among the best discriminating characters by Majumdar and Rao (1960:95), shows a non-significant difference between means in 100% cases. MCL shows non-significant difference in 90.3% cases, UFH, in 90.5% cases.

The homogeneity is proved by something else too. Cappieri prepared frequency polygons for four essential characters. These polygons so closely fit a normal curve that the homogeneity of the total group, in respect of these characters, cannot be questioned. Cappieri's (1970:22-24) frequency polygons are reproduced in the following page (Fig. 4-6).

---

* Cappier's (1969 : 4-5) 'Asiatic Proto-Mediterranean' or Guha's *Palae-Mediterranean* sub-type.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

III. The 'Neolithic-Chalcolithic' of the Deccan:

(a) Piklihal: The Neolithic site of Piklihal (Allchin, 1960) is in Andhra Pradesh. Excavation revealed that at the end of the Neolithic phase and before the Iron phase there was an intrusion of a red-and-black ware which would seem to indicate a Chalcolithic people. The following five cultural phases can be distinguished at Piklihal;

5. Early Historic Culture —Upto c.300 A.D.
4. Iron Age —c.550 B.C. to 1st Century A.D.
3. Intrusion Phase (Chalcolithic) —c. 650 to 550 B.C.
2. Upper Neolithic Phase —c.1250 to 650 B.C.
1. Lower Neolithic Phase —c.2000 to 1250 B.C.

Three complete human skeletons (two adults and one child) and one fragment of a mandible were unearthed from the Neolithic period at Piklihal. The measurements on the two adult crania (one male and one female) have been reported by Ayer (1960) and are given below :

Measurements (mm.)	*Male(1)*	*Female(1)*
MCL	172.0	175.0
MCB	139.0	131.0
BBH	141.0	131.0
PBH	124.0	110.0
MFB	95.0	94.0
BZB	126.0	128.0
NH	46.0	46.0
NB	23.0	23.0
Indices		
CI	79.4	74.9
LBI	87.7	74.9
BBI	101.4	100.0
LPI	72.7	62.9
BPI	80.6	74.9
NI	51.1	51.1

In cranial form both the adult cranial resemble in general the modern south Indian skull belonging to Guha's *Palae-Mediterranean* Physical type. The forehead is well marked, vertical in the male and slightly receding in the female. The frontal eminences are not protruding. The supra-orbital ridges are smoothly rounded in the female and somewhat rougher in the male. The stature would fall in the medium to tall category. The head is long and the jaws are slightly prognathous. As we shall see

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

presently the physical type represented in the Neolithic Tekkalkota is not different from what we described at Piklihal. The physical type in question is *Mediterranean, Palae-Mediterranean* of Guha's definition to be more specific.

The *Palae-Mediterranean* physical type, from whatever evidences we have, might well have been the first Neolithic settlers in the Deccan. Allchin (1960:141) prefers to use the term 'Dravidoid' (with all its linguistic connotations) for the neolithic settlers of Deccan and believes that this stock was very widely spread throughout the Iranian plateau, and even Central Asia, in pre-Bronze times.

It is interesting to note that the same physical type has been identified in Central Asia by Soviet archaeologists and anthropologists in the Keltiminar culture and even in the subsequent Bronze Age. Trofimova (1961 : 65), in discussing the skeletal finds of a Chalcolithic site in South Turkmenistan (dated 4th millenium B.C.), thinks that the south Turkemenistan finds show a connection with the south Indian ('Dravidoid') type of population of India in early Chalcolithic times.

(b) *Maski* : In the Chalcolithic site of Maski, in the Raichur district of Andhra Pradesh, a large number of burials were discovered. Three periods are distinguished as follows (Thapar, 1957 : 20) :

Period I—The Chalcolithic Culture—Early 1st Millenium B. C. to c. 400 B.C.

Period II—The Megalithic Culture—c. 200 B.C. to middle 1st century A.D.

Period III—The early historical period.

The burials belong to the South Indian Megalithic Complex (discussed later) and represent an intruding megalithic folk. The detailed report on the skeletons is still awaited but the skeletons exhibit two types of people—a *Mediterranean* and a broad-headed type (Majumdar, 1958 : 26).

(c) *Tekkalkota* : The Neolithic site of Tekkalkota is in the Bellary district of Mysore. The excavation was conducted by Rao (1965), and Malhotra (1965) has reported on the human skeletal remains. Radio-carbon dating of three charcoal samples gave absolute ages between 3395 and 3730 years (Rao, 1965: xii).

Seven fractional burials have been unearthed at Tekkalkota. A more or less complete set of measurements are available on three crania only (specimen Nos. 2, 5 and 7); two have been identified as male and the third is female. The measurements are given below.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Measurements	*Male (2)*			*Female (1)*
(mm.)	*1*	*2*	*Mean*	
MCL	185.0	178.0	181.5	181.0
MCB	134.0	132.0	133.0	122.0
BBH	146.0	—	146.0	—
PBH	120.0	117.0	118.5	114.0
MFB	91.0	94.0	92.5	84.0
UFH	63.0	—	63.0	72.3
NH	50.0	—	50.0	52.0
NB	28.0	—	28.0	24.0
HC	491.0	507.0	499.0	490.0
	Indices			
CI	72.43	74.16	73.30	67.40
LBI	78.92	—	78.92	—
BBI	105.22	—	105.22	—
LPI	64.86	65.73	65.30	62.98
BPI	89.55	88.64	89.10	93.44
NI	56.00	—	56.00	46.15

Malhotra (op. cit.) finds the Tekkalkota crania resembling those found at Piklihal, Nevasa, Chandoli (all described earlier) and those associated with the Brahmagiri Stone Age Culture (described later). Except for the Piklihal male specimen, which approaches brachycrany, all the crania of the above series are dolichocranic. The Tekkalkotians are also close to the 'robust' Mohenjo-daro Group A crania. In nasal index, one of the Tekkalkota specimens is leptorrhini, the other chamaerrhini. The size and form of the frontal bone, the medium to deep depression of the nasal root, the prominent glabella region, pronounced supra-orbital ridges in the males, protruding occiput, prominent muscular impressions and a slight sub-nasal prognathism of the Tekkalkotians brings them quite close to the 'robust' Group A series of Mohenjo-daro. The predominant physical type of the Neolithic-Chalcolithic Tekkalkota seems very much akin to Guha's *Palae-Mediterraneans*, no doubt mixed to a degree with an *australoid* element as was observed in the case of the Chalcolithic Nevasians. It should be noted that the *Palae-Meditarranean* sub-type of Guha's *Meditārranean* physical type is the predominant element in the population of south India even today.

IV. The Megalithic Complex of South India

All the megaliths of south India, though differing structurally, form a complex with certain common features like the use of iron, wheel-turned Black-and-Red pottery and post-excarnation fragmentary and collective burials. Even the urn burials of Adichanallur which are not associated with any megalithic cist or circle are bound to

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

this megalithic complex by virtue of the above characteristics. This complex is what we shall refer to as the 'megalithic Culture' of south India which differs from the megalithic culture of Assam, Bihar and Orissa (forming part) of the 'South-East Asiatic Megalithic Culture' in the following respects (Krishnaswamy, 1949):

(i) While the monuments of the South-East Asiatic Megalithic Culture are memorials, often unconnected with graves, almost all megalithic monuments of the South Indian complex are tombs.

(ii) While the South-East Asiatic Megalithic Culture belongs to the late stone stage (coming down upto even eighth century A. D.), the south Indian Megalithic Culture is rooted in the Early Iron Stage.

(iii) While there is some structural relationship or link, between the South Indian and the Mediterranean megalithic culture (in architectural features 'portholes', etc.), the North-East Indian megalithic culture (the South-East Asian complex) shows no characteristics linking it to above cultures.

Human skeletal remains associated with megalithic culture are known from several sites in the Deccan and South India of which the skeletons associated with Period II (megalithic culture) of Maski have already been referred to. Human skeletal remains from the following megalithic sites have been reported.

(a) *Raigir* : A Megalithic site in Raigir, near Hyderabad, Andhra Pradesh, was excavated long time ago by Hunt (1924) who described 22 burial cairns. No osteometric study of the skeletons was done until recently when Kennedy (1964) studied and reported on the fragments of six Raigir calvariae that are now in the collection of the British Museum, London. The available measurements on the calvarial fragments are given below :

Measurements (mm.)	*Male*		*Female*	
	No.	Mean	No.	Mean
MCL	2	190·0	4	173·0
MCB	2	132·0	2	139·0
MFB	2	97·5	2	92·5
HC	1	520·0	1	543·0
Index				
CI	2	68·60	2	75·83

The range of cranial index of the Raigir calvariae is from 61·54 to 78·65 (dolicho- to meso-cranic). The MCL varies from 185 to 195 in the male and from 160 to 189 in the female. The minimum MCB is 124 in the male, 138 in the female and the maximum is 140 in both the sexes. One of the male specimens has a pronounced supraorbital torus.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The frontal height is low and the occiput rounded in all specimens. All the specimens exhibit slight sagittal keeling and one of the female specimens has a sagittal crest.

Comparative metrical and morphological analysis of Raigir calvariae led Kennedy to conclude that the phenotype in question is one akin to the *Mediterranean* physical type.

(b) *Brahmagiri* : In the excavation at Brahmagiri (Wheeler, 1948), in the Chitaldrug district of Mysore, were discovered three levels of culture as follows :

I. Stone-Axe Culture—Early 1st millenium B.C. to early 2nd century B.C.
II. Megalithic Culture—c. 200 B.C. to middle 1st century A.D.
III. Andhra Culture —Middle 1st century A.D. to 3rd century A.D.

Burials have been discovered both from the Stone-Axe culture and the Megalithic culture. Sarkar (1960) has reported on the human remains from 10 megalithic burials and a large number of urn and open burials belonging to the Stone-Axe culture (in the light of new discoveries it should be included under the 'Neolithic-Chalcolithic' cultures and dated to 1,300—1,000 B.C.).

The Stone-Axe Culture yielded one open burial of a child and several urn burials of infants. The child skull has *australoid* characteristics and is hyperdolichocranic (CI=69·3), orthocranic (LPI=59·5) and metriocranic (BPI=85·9).

Four skulls from the megalithic burials were in comparatively better state of preservation. They vary between the cranial index of 78·21 and 83·52. LPI varies between 57·82 and 63.69, BPI between 73·36 and 80·48, and NI between 52·94 and 62·50. On the whole, the crania appear to be on the border line between meso—and brachycranic. They can be generally described as orthocranic, tapeinocranic and hypercha-maerrhine in terms of LPI, BPI and NI respectively. All the crania agree in a large number of morphological characters. The stature is estimated to vary from 1621 to 1699 mm. on the basis of two femora. The mean values of measurements for the series of five male crania are as follows :

Measurements (mm.)	*Mean of 5 male crania*
MCL	187·0
MCB	144·0
BBH	138·0
PBH	112·0
MFB	94·0
EZB	89·0
UFH	59·0
NH	48·0
NB	25·0

CC-0. Panjab Digital Presevation Foundation, Chandigarh

Indices	
CI	77·1
LBI	74·8
BBI	94·5
LPI	59·9
BPI	78·0
UFI	57·3
NI	58·8

According to Sarkar (1960), the cranial characters conform neither to the *Australoid* nor to the 'Indo-Aryan' ethnic type but are indicative of a foreign element. He thinks that the physical type represented by a more or less medium statured, mesocranic, medium vaulted, flat nosed, robust boned and powerful jawed skeletal population is probably akin to the '*Scytho-Iranian*' stock of Arien Kappers (1934) who identified this type from the 77-79 cranial index people indicated at period III of Tepe Hissar. Kappers' hypothesis is that the great migration of these 'Scytho-Iranians' took place between 1000 and 2000 B.C. from the region of Ukraine. The 77-79 range of cranial index is to be found in a very high frequency among the present Iranian population. Majority of the Kurds and the Aderbeijani would fall within this range of cranial index.

Sarkar (1960) also draws attention to the overwhelming brachycephaly in period VI at Sialk, as reported by Vallois (1940), and suggests that the Sialk brachycephaly may also be responsible for the brachycephaly of Brahmagiri megalithic people.

Yelleswaram : This is a megalithic site of Andhra Pradesh in the district of Nalgonda and is situated on the left bank of the river Krishna, opposite to the site of Nagarjunakonda. Six skulls and some bones from the megalithic burials were studied by Gupta and Dutta (1962). The skulls are massive, rugged and thickboned. Of the three male skulls one is hyperbrachycranic and two brachycranic while one of the female crania is mesocranic They are all hypsicranic in terms of LPI. The stature is estimated to vary from 'above medium' to 'tall.' Measurements are available on 3 male and two female crania which are shown below :

Measurements (mm.)	*Male* (3)	*Female* (2)
MCL	175·0	169·0
MCB	146·0	129·0
BBH	134·0	—
PBH	118·0	111·0
MFB	96·0	92·0
NH	46·0	—
NB	26·0	—

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Indices		
CI	83·8	75·5
LBI	76·5	—
BBI	95·0	—
LPI	67·4	65·6
BPI	83·6	85·3
NI	56·5	—

The Yelleswaram finds, according to Gupta and Dutta, lend support to Sarkar's contention that the megalithic brachycephals of Deccan show affinity to the Sialk Cemetery B people.

(d) *Adichanallur* : Excavation at the Iron-Age burial site of Adichanallur in the Tinnevelly district of Madras brought to light a number of earthenware urns containing human bones. Thurston (1909) found two skulls to be conspicuously prognathous and he quoted Lapique (1905) to say that these skulls were of a 'Proto-Dravidian' stock.

The six well-preserved skulls in the Madras Museum collection have the cranial index ranging from 66 to 78, a cranial length (MCL) ranging from 168 to 191 and a cranial breadth (MCB) ranging from 122 to 131 mm.

Sewell and Guha (1931) have given the average values of measurements on nine skulls from Adichanallur. The mean cranial capacity is 1,532 c.c., mean cranial index, 69·7, mean length-auricular height index, 67·06, mean upper facial index, 50·45, and mean nasal index, 51·62. These nine skulls seem to approximate the Kish skulls and Mohenjodaro Type I skulls described earlier,

Two skulls were examined by Prof. Elliot Smith (Zuckerman, 1930) who found one to be 'Proto-Australoid' (australoid) in characteristics and the other, Mediterranean. The australoid skull compares very well with modern Australian skulls. The other skull compares well with modern Tamil skulls (mediterranean physical type).

Chatterjee and Gupta (1963) have published a set of measurements on a series of seven male and four female skulls. The mean values are given below :

Measurements (mm.)	*Male (1-7)*	*Female (1-4)*
MCL	185·0	180·0
MCB	130·0	128·0
BBH	133·0	126·0
PVH	117·0	114·0
MFB	93·0	92·0
BZB	126·0	128·0
UFH	61·0	62·0
NH	51·0	47·0
NB	25·0	27·0

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Indices		
CI	69·9	70·5
LBI	70·8	69·3
BBI	120·0	103·6
LVI	61·0	64·0
UFI	47·6	54·6
NI	49·4	54·0

The cranial index of the Adichanallur specimens varies from mesocranic to hyperdolichocranic and the nasal index from mesorrhine to chamaerrhine. Many of the specimens exhibit occipital protrusioa, pronounced glabellar region, prominent supraorbital torus and parietal eminences, bulbous frontal region and a slight subnasal prognathism. Many of these morphological features are strikingly similar to those of the Nevasa specimens. It is evident that the basic element among the Adichanallur skeletal population is the Mediterranean physical type while a secondary element can be recognized as Australoid.

(e) *Jewurgi*: Lastly should be mentioned a skull discovered by Meadows Taylor from the famous ruins of Jewurgi in Deccan. Taylor (1863) published only the drawing of a skull discovered from a megalithic burial. Guha (1937) thought that the drawing showed pronounced negroid characteristics. Sarkar (1954), however, thinks that the skull has undergone certain amount of deformation and there is no way of recognizing the physical type.

The Origin of the Megalith Builders

The identity of the megalithic people has been a question in the minds of archaeologists and anthropologists for quite sometime. The cult of megaliths was certainly brought to India from outside and the excavations at Brahmagiri, Hallur, Paiyyampalli etc. certainly demonstrate that the iron using megalithic culture was an intrusion into the earlier stone-axe (neolithic-chalcolithic) culture. The Physical type represented by the skeletal remains associated with the stone-axe culture certainly seems different from the physical type represented by the megalithic skeletal remains of Brhamagiri and Yelleswaram. While the physical type associated with the stone-axe culture is the same (*palae*) *Mediterranean-Australoid* complex encountered at Piklihal, Nevasa, Chandoli and Tekkalkota, the meso-brachy (even hyperbrachy) element of Brahmagiri and Yelleswaram is certainly a new type of people. The *Mediterranean* element discovered at megalithic Raigir and Adichanallur does not help explaining the presence of the meso-brachycranic physical type at megalithic Brahmagiri and Yelleswaram. That the *Palae-Mediterranean* physical type of the neolithic-chalcolithic survived through the Iron Age and beyond is almost a certainty but the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

question is : Was the megalithic cult brought to India by the mesobrachycranic people or by a fresh wave of *Mediterraneans* (Guha's *Mediterranean Proper* physical type?) from the west?

Christoph von Haimendorf, in his Presidential Address to the Anthropology Section of the Indian Science Congress, Poona 1950 (Srinivasan and Banerjee, 1953 : 114), seemed to equate the megalithic builders with the Dravidian speakers on the ground that the present distribution of the Dravidian languages coincides largely with that of megalithic monuments (in south India). As regards the origin of the megalithic people, Haimendorf supposes that they originated from the Mediterranean region since there is some structural similarity between the south Indian and the Mediterranean megaliths. As Srinivasan and Banerjee (1953 : 114) have pointed out, such a theory would presuppose a great antiquity of the migration of the megalithic folk since there are enough evidences of a great antiquity of the Dravidian languages in India (earlier than 300 B.C.) Haimendorf suggests a date of about 500 B.C. for the migration of the megalithic people ('Dravidians', according to Haimendorf), very close to what Gordon (1950) suggested (332 B.C. to 500 A.D.). The megalithic culture at Brahmagiri has been dated from 300 B. C. to 50 A. D. However, C^{14} dates of the Megalithic Culture at Hallur is 1000 B. C. and at Takalghat 550 B. C. (Appendix I).

If Haimendorf's theory is accepted we are faced with two problems. Firstly, if the Dravidian speakers were the bearers of the megalithic cult to India around the third century B.C. (coming from the Mediterranean region) who were the *Palae-Mediterranean* (referring to the physical type)people of the Neolithic-Chalcolithic who, in all probability, were also the architect of the Indus Valley Civilization ? Haimendorf's theory does seem to exclude the possibility that the Indus Valley people were Dravidian speakers whereas evidences are mounting to show that the Indus Valley scripts are actually 'Proto-Dravidian' (Parpola *et al*, 1969)*. Secondly, it is difficult to identify the meso-brachycranic people represented by the skeletal remains at Brahmagiri and Yelleswaram as the Dravidian speakers originating from the Mediterranean region. Haimendorf proposed his theory long before the reports on the Brahmagiri and Yelleswaram skeletal remains were published and the discovery of this meso-brachycranic physical type changes the total picture and makes Haimendorf's theory almost unacceptable.

Sarkar (1960) identifies the physical type of the Brahmagiri megalithic people as the 'scytho-Iranian' of Kappers and related to the brachycephalic type represented at Sialk VI and Tepe Hissar III. It is difficult to prove or disprove Kapper's (1934) hypothesis about the migration of the so-called 'Scytho-Iranian' people from the region

---

* B. B. Lal (1969), however, feels that the theory of Parpola is not well founded, and that on all counts it appears that it is a language now completely lost to us.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

of Ukraine between 1000 and 2000 B. C. but the range of cranial index (77-79) ascribed to this stock is indeed very high among the present Iranian population.

At the present state of our knowledge we can perhaps only conclude that the megalithic people were a physical type foreign to India and morphologically somewhat related to the type represented at Sialk VI and Tepe Hissar III. The exact point of their origin remains the subject of further research.

SUMMARY AND CONCLUSIONS

What broad conclusions can we draw about the physical types in pre-and protohistoric India from whatever skeletal evidences we have? This would be the question in the mind of the reader of the foregoing chapter. We shall try to answer the question remembering, of course, that it would be like trying to visualise a complete picture from shreds and patches.

We do not have skeletal evidences of the physical types during the Palaeolithic. The earliest cultural stage that has yielded skeletons of the culture bearer is that represented at Langhnaj—a stone stage prior to or at the beginning of the Neolithic. A date of about 2,500 B. C. has been proposed for this culture at Langhnaj. Two physical types are indicated : one which Guha has called *Palae-Mediterranean* and another which Guha has called 'Proto-Australoid' and we (following Sarkar and others) chose to call *Australoid*. To give a visual picture, the first type would correspond to the type represented by the modern Tamil-speakers of India and the second, to the type represented by the majority of the tribal people of our country, particularly those of central and south India.

At about the same time when the above mentioned types of people were living in a primitive stone stage in Gujarat, the valley of the river Indus saw the florescence of a great civilization whose exact origin is buried in deep water. This civilization, popularly known as the Indus Valley Civilization, had slowly spread as far as Gujarat in the west and probably Andhra Pradesh in the south. The typical culture, with characteristic pottery, copper and bronze objects and seals with pictographic scripts is referred to as the Bronze Age culture and which is known to us from numerous sites many of which have yielded human skeletal remains as discussed in the foregoing pages. In fact, by far the majority of the prehistoric skeletons known to us from India come from sites of the Copper-Bronze Age including the two principal sites (the two biggest known cities of the culture)— Mohenjo-daro and Harappa (now in Pakistan). What were the physical types in the population of the above mentioned civilization? If we leave out the whole bunch of technical and scientific jargon, we come to the simple conclusion that the people who dwelt in northern and north-western India (and perhaps built the great Indus Valley Civilization) during the Bronze Age

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

basically different from the people who made microliths (small stone tools) at Langhnaj, in Gujarat. In other words, the population of Indus Valley during the Bronze Age principally comprised a physical type akin among others, to the modern Tamil speakers of south India *Mediterranan* physical type) mixed with (and perhaps interbred with) a type not unlike the aboriginals who now dwell in the hills and forests of central and south India *Australoid* physical type). It is difficult to infer the ranking of these two types of people in the social structure of the Bronze Age society but if the Indus Valley pictographic scripts (see Parpola *et al*, 1969) are finally accepted as proto-Dravidian scripts we might assume that the society was dominated, if not ruled, by the makers of the scripts and the Austric-speakers (*Australoids*) probably occupied the lower rung of the society. However, this would only be an assumption and not a conclusion derived from a study of the skeletal remains.

Besides the above types, traces of other elements are doubtless indicated. Besides variants of the *Mediterranean* physical type (as can be seen in the non-tribal population of India as a whole, as a pervading element) which have been variously interpreted and variously designated by different authors, we do notice a broad-headed element, call it 'Alpine' or 'Alpo-Dinaric', in the Bronze Age but this element does not seem to have formed a substantial part of the population.

We can say that a *Mediterranean-Australoid Complex* and a *Mediterranean* type *per se* were the principal components of the population of the Copper-Bronze Age India. Several studies have indicated that while the *Mediterranean-Australoid Complex* has survived only in the tribal population of modern India, the *Mediterranean* type *per se* has survived, with different degrees of admixture with different foreign elements that entered India during the 3,500 years that followed the Indus Valley Civilization, in the rural and urban population along the length and breadth of modern India, to form the most pervading element in the non-tribal population of India to-day.

Let us now see the evidences from the Neolithic-Chalcolithic culture of the Deccan where Bronze Age elements can be seen as intrusive in most of the sites. Do we find the identity of the Neolithic-Chalcolithic people of the Deccan ? Yes, we have evidences both from Piklihal and Tekkalkota but the interesting fact is that the physical type is still the same as we have noticed at the Indus sites further north—a *Mediterranean* physical type, mixed to a certain degree with *Australoid* elements. The Neolithic-Chalcolithic stage is usually dated between c. 2,300 and c. 1,000 B C. and the Megalithic culture did not reach Deccan until about 1000 B.C. We can safely assume that the Neolithic-Chalcolithic culture of Deccan existed side by side with the Indus Civilization during c. 2,500—1,500 B.C. And yet the same type of people comprised the population in both the areas or cultural zones, if we leave out the small percentage of extraneous elements

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

here and there. What can we conclude from this interesting fact? The simple logical deduction would be that both the above mentioned cultures (as also the 'microlithic' culture of Langhnaj) were locally derived. In other words, there is no reason to look for a Bronze culture arriving from outside and intruding upon the Neolithic-Chalcolithic settlers of the Deccan.

We identify, for the first time, the arrival of a new type of people—a type that did not exist in India before—as the bearer of the *Megalithic Culture** of south India. These people were broad-headed and not akin to any of the types that we have encountered before. To use a designation, Sarkar calls this type 'Scytho-Iranian' after Kappers (1934) who described this type at period III of Tepe Hissar. The type can be best seen as the meso-brachycephalic element in the present Iranian population. The arrival of this type of people is most definitely indicated at Brahmagiri (as the bearer of the Megalithic Culture) where the child skull of the Stone-Axe (same as Neolithic-Chalcolithic) Culture, physically speaking, is still part of the *Mediterranean-Australoid Complex.* This, however, does not mean that the *Meditarranean* physical type did not exist in the megalithic south India. It certainly did and formed part of the population as is indicated at megalithic Raigir and Adichanallur.

From the Megalithic cultural stage to the present day is, however, a long history of invasions, "race-mixture" and ethnic upheaval which has altered the composition of the Indian population beyond measure or accurate description. So much so that the study of physical types in the population has become meaningless. On the other hand, scientists are becoming more and more concerned with ongoing processes of evolution so that studies of 'races' or physical types have given place to scientific studies of variation and variability in the population, aspects of microevolutionary processes, growth patterns, and nature-nurture interaction. In many parts of the world the human race seems to have become progressively taller and the head rounder and rounder in the last few centuries ; people who have migrated to new settlements outside their homeland seem to have physically changed from the parent population. These are some of the issues that interest the Physical Anthropologists, since the world became smaller, isolation became a thing of the past and the study of 'races' lost its meaning.

---

* S. P. Gupta calls it "Hallur Culture" after the type site Hallur in District, Dharwar, Mysore Although he is right in doing so, I have decided to use the more popular term.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

References of Chapter 9

Agrawal, D. P. 1970 *Copper-Bronze Age in India.*

Allchin, F. R. 1960 *Piklihal Excavations.* Andhra Pradesh Govt. Archaeological Series No. 1

Ayer, A. A. 1960 "Report on human skeletal remains excavated at Piklihal (Deccan) from a site of chalcolithic culture." *In* Allchin (1960).

Buxton, L. H. D. 1924 "On the human remains excavated at Kish." In EXCAVATIONS AT KISH (by Langdon) I, appendix : 115.

Cappieri, M. 1961 "Die asiatischen Proto-Mediterranen". *Ethnographie and Archaeologie*, 2 : 95-111.

1962 "India : the Proto-Mediterraneans of the Near and Middle East." *Proc. XVIII Int. Congr. Sociol.* (1958), II : 228.

1969 *The Mediterranean Race in Asia before the Iron Age.* Occasional Paper No. 8. Field Research Projects, Coconut Grove, Florida.

1970 *The Population of the Indus Civilization* (edited by Henry Field). Occasional Paper No. 11. Field Research Projects. Coconut Grove, Florida.

Chanda, R. P. 1916 *The Indo-Aryan Races.* Rajashi

Chatterjee, B. K. & G. D. Kumar 1961 "Comparative study and racial analysis of human remains of Harappa". In *Summaries of papers of the International Conference on Asian Archaeology.* New Delhi.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chatterjee, B. K. & G. D. Kumar 1963 "Racial elements in post-Harappan skeletal remains at Lothal." In *Anthropology on the March* (edited by Bala Ratnam) : 104-110. Madras.

(Undated) *Comparative study and racial analysis of the human remains of Indus Valley Civilization with particular reference to Harappa*, Calcutta.

Chatterjee, B. K. & P. Gupta 1963 *Report on the Aditanallur Skulls*. Calcutta.

Chatterjee, S. K. 1951 "Race movements and pre-historic cultures." In *Vedic Age* (edited by R. C. Majumdar) : 141-168. London.

Ehrhardt, S. 1960 "Schlagspuren, Buche and Spunge an den skeletten von Langhnaj im nordlichen Gujarat, Vorderindien". *Anthrop. Anz.*, 24 : 178-183.

1960a "The Urn Burials." In *From history to prehistory at Nevasa* (1954-55) (edited by H. D. Sankalia & others), appendix I : 506-522. Poona.

1963 "Fruhmenschliche skelette aus Langhnaj in Gujarat," Vorderindien, *Zeit. Morph. and Anthrop.*, 54 : 151.

1964 "Uber protohistorische menschliche skelettfunde in Vorderindien". *Zeit. Morph, und Anthrop.*, 56 : 33

Ehrhardt, S. & K. A. R. Kennedy 1965 *Excavations at Langhnaj : 1944-63. Part III —The Human Remains*. Deccan College. Poona.

Fischer, E. 1921 *Human Heredity* (by Baur, Fischer & Lenz). London.

Foote, R. B. 1916 *The Foote collection of Indian Prehistoric and Protohistoric Antiquities in the Government Museum, Madras : Notes on their ages and distribution*. Madras.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Gordon, D. H. 1950 "The early use of metals in India and Pakistan". *Jour. Royal Anthrop Inst.*, LXXX

1960 *The Prehistoric background of Indian Culture.*

Guha, B S. 1931a "Human Remains." In *Mohenjodaro and the Indus Civilization* (by John Marshall) : II : 599-648.

1931b "Report on a collection of bones made by Sir Aurel Stein in Makran." In *Memoire of the Archaeological Survey of India* : 43 : Appendix : 191-199.

1935 *Racial Affinities of the Peoples of India.* Census of India, 1931 : I : part 3

1937 *An outline of the racial ethnology of India.* Indian Science Congress Association. Calcutta.

1944 *Racial Elements in the Population.* Oxford Pamphlets on Indian Affairs, No. 22.

Guha, B. S. & P. C. Basu 1931 "A report on the human relics recovered by the Naga Mills (Burma) Expedition for the abolition of human sacrifice during 1926-27." *Anthrop Bull.* No. 1, Zoological Survey of India. Calcutta.

1938 "Report on the human remains excavated at Mohenjodaro in 1928-29." In *Further Excavations at Mohenjo-daro* (by E. J. H. Mackay) : I : XVIII : 613.

Gupta, P. & P. C. Dutta 1962 "Human remains excavated from megaliths at Yelleswaram Andhra Pradesh)." *Man in India*, 42 : 1 : 19.

Gupta, P., P. C. Dutta & A. Basu 1962 "Human remains from Harappa." In *Human Skeletal Remains from Harappa.* Anthrop. Survey of India, Memoir No. 9. Calcutta.

Iunt, E. H. 1916 "Hyderabad Cairns : Their Problems." *Jour. Hyderabad Arch. Soc.*, Art 10 : 180-224.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

1924 "Hyderabad Cairn burials and their significance". *Jour. Roy. Anthrop. Inst.* 54 : 140-56.

Kappers, C. U. A. 1934 *A Introduction to the Anthropology of the Near East in Ancient and Recent Times.* Amsterdam.

Karve, I. & G. M. Kurulkar 1945 *Human Remains Discovered so Far. (A Preliminary Report on the Human Skeletal Remains Found at Langhanj in February and December, 1944).* The Times of India Press. Bombay.

Karve-Corvinus, G. & K. A. R. Kennedy 1964 "The preliminary report of the 1963 archaeological expedition to Langhnaj, northern Gujarat." *Bull. Deccan Coll. Res. Inst.* 24 : 45-57. Poona.

Keith, A. 1919 "Report on two human crania of considerable but uncertain antiquity" *Jour. Anthrop. Soc. Bombay*, 11 (6) : 663-672.

1927 "Report on the human remains at Al Ubaid." In *Ur Excavations* (by H. R. Hall & C. L. Woolley), I Oxford.

1929 "Human skulls from ancient cemeteries in the Tarim Basin." *Jour. Roy. Anthrop. Inst.*, 59 : 149.

Kennedy, K. A. R. 1964 "Megalithic Calvariae from Raigir, Andhra Pradesh." *The Anthropologist*, XI, 1&2 : 1-24.

Kennedy, K. A. R. & K. C. Malhotra 1966 *Human skeletal remains from Chalcolithic and Indo-Roman levels from Nevasa : an anthropometric & comparative analysis.* Poona. Dec. Coll.

Krishnaswami, V. D. 1949 "Megalithic types of South India". *Ancient India*, 5 : 35-45.

Krogman, W. M. & W. H. Sassaman 1943 "Skull found at Chanhu-Daro". In Mackay (1943) : 252-264.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Krogman, W. M. 1940 "Racial types from Tepe Hissar, Iran, from the late fifth to the early second millennium B. C.". *Verh. Kon. Ned. Akad. Wetensch.*, Abt. Natuurk, 2, Sect. 39(2). Amsterdam.

Lal, B. B. 1963 "A picture emerges : an assessment of the carbon-14 datings of the proto-historic cultures of the Indo-Pakistan subcontinent." *Ancient India*, 18-19 : 208-221.

1969 "Some observations on Harappan Scripts," *India's contribution to World Thought and Culture*, Vivekanand Samiti, Madras.

Lapicque, L. 1905 "Note sommaire sure une mission ethnologique dans le Sud de l'Inde : la race noire Pre-Dravidienne". *Bull. Mus. Hist. Nat.*, 11 (5) : 283-285. Paris.

Mackay, E. J. H. 1938 *Futrher Excavations at Mohenjo-daro*. I&II. Govt. of India Press.

1943 *Chanhu-Daro Excavations, 1935-36*. New Haven.

Majumdar, D. N. 1958 *Race and Cultures of India*. Asia Pub. House.

Majumdar, D. N. & C. R. Rao. 1960 *Race Elements in Bengal*. Calcutta.

Malhotra, K. C. 1963 "The Chandoli Skull". *Link*, archaeology, 41. Nov. 1963.

1965 "Human skeletal remains from Chandoli." In *Chalcolithic Chandoli*, Appendix I : 143. Deccan College, Poona.

Marshall, J. 1931 *Mohenjodaro and the Indus Civilization*, I & II. London.

Martin, Rudolf 1928 *Lehrbuch der Anthropologie in systematicher derstellung*, erster band. Jena.

Morant, G. M. 1928 "A preliminary classification of European races". *Biometrika*, 20.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Parpola, A., S. Koskenniemi, S. Parpola and A. Pennti 1969 *Progress in the decipherment of the Proto-Dravidian Indus Script.* The Scandinavian Inst. of Asian Studies. Copenhagen.

Rao, M. S. Nagaraja & K. C. Malhotra 1965 *The Stone Age hill dwellers of Tekkalakota.* Deccan College. Poona.

Rao, S. R. 1963 "Excavations at Rangpur and othar explorations in Gujarat" *Ancient India*, 18 & 19 : 5-207,

Roy-Choudhurry, D. 1964 "Problems of race identification and race movement in pre-and proto-historic India." *Proc. Summer School in Anthropology, 1964.* Dalhousie. India.

Sankalia, H. D. 1946 *Investigations into the prehistoric archaeology of Gujarat.* Official report of the First Gujarat Prehistoric Expedition 1941-42. Memoir IV : 1-334. Baroda State Press.

1955 "Excavations at Langhnaj, Gujarat." *Man* 55 : 33 : 26.

1962 *Prehistory and Protohistory in India and Pakistan.* Bombay.

1965 *Excavations at Langhnaj, 1944-63.* Pt. 1 —Archaeology.

Sankalia, H. D. & I. Karve 1944 "The Second Gujarat Prehistoric Expedition. A preliminary account of the search of Microlithic Man in Gujarat." *New Indian Antiquary*, 1 : April 1-6.

1945 *Preliminary Report on the Third Gujarat Prehistoric Expedition.* The Times of India Press. Bombay.

1949 "Early primitive microlithic culture and people of Gujarat." *Amer. Anthrop.* 51 : 28-34.

Sankalia, H. D., S. B. Deo, Z. D. Ansari & S. Ehrhardt 1960 *From History to Prehistory at Nevasa (1951-56).* Deccan College. Poona.

Sarkar, S. S. 1954 *The Aboriginal Races of India.* Calcutta.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Sarkar, S. S. 1960 "Human skeletal remains from Brahmagiri." *Bul. Dept. of Anthrop.* Govt. of India, 9(1) : 5-40.

1964 *Ancient Races of Baluchistan, Punjab and Sind.* Calcutta.

Sen, D. K. 1965 "Races of Ancient India—A study of methods." *Pres. Address, Sec. of Anthrop. & Arch., Indian Science Congress (51st/52nd).*

Sewell, R. B. S. & B. S. Guha 1929 "Report on the bones excavated at Nal." *mem. Archaeol. Survey of India.* 35 (Excavation in Baluchistan), Appendix.

1931 "Human remains." In *Mohenjo-daro and the Indus Civilization* (by John Marshall), 2 : 599-648.

Srinivasan, K. R. & N. R. Banerjee 1953 "Survey of South Indian Megaliths". *Ancient India*, 9 : 103-115.

Subbarao, B. 1962 "Archaeology and Anthropology in India." In *Indian Anthropology* (edited by Madan & Sarana) : 105-131.

Taylor, M. 1863 "Descriptions of Cairns, Cromlechs, Kistvaens and other Celtic, Druidical or Scythian monuments of the Dekhan." *Trans. Roy. Irish Acad.* 24, Art. 5 : 329-362.

Thapar, B. K. 1957 "Maski 1954—A chalcolithic site of the southern Deccan." *Ancient India*, 13.

1969 "The Aryans —A Reapraisal of the Problem" *India's contribution to World Thought and Culture*, Madras.

Thurston, E. 1909 *Castes & Tribes of Southern India*, I. Madras.

Trofimova, T. A. 1961 "The chalcolithic and bronze age population of Central Asia and its South Indian relation in the light of the latest chronological data". In *Summaries of Papers of the International Conference on Asian Archaeology*. New Delhi.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Vallois, H. V. 1940 *Les Ossements Humains de Sialk.* Paris.

Vats, M. S. 1940 *Excavation at Harappa,* I:6:238

Wheeler, R. E. M. 1947 "Harappa 1946 : The defences and cemetery R-37," *Ancient India,* 3:58:130.

1948 "Brahmagiri & Chandravalli 1947." *Ancient India,* 4:181.

Zuckerman, S. 1930 *The Adichanallur Skulls.* Madras Govt. Museum.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX I

IMPORTANT C^{14} DATES

Adamgarh, Madhya Pradesh

Late Stone Age (Microlithic)	= TF-120=5,600 ± 130 B.C.

Ahar, Rajasthan

Chalcolithic	= V-57 = 2144 ± 98 B.C.
Chalcolithic	= TF-31 = 1273 ± 108 B.C.

Atranjikhera, U.P.

Painted Grey Ware (Iron Age)	= TF-191 = 1025 ± 110 B.C,

Burzahom, Kashmir

Neolithic	= TF-128 = 2375 ± 120 B.C.

Butkara II, Swat Valley

Period III	= Rome Lab. = 464 ± 40 B.C.

T. Narsipur, Mysore

Neolithic period	= TF-412 = 1805 ± 110 B.C.
Neolithic period	= TF-413 = 1495 ± 110 B.C.

Tekkalkota, Mysore

Neolithic period I	= TF-266 = 1780 ± 105 B.C.
Neolithic period II	= TF-262 = 1610 ± 140 B.C.

Sonegaon, Maharastra

Chalcolithic (Jorwe phase)	= TF-380 = 1375 ± 110 B.C.
Chalcolithic (Jorwe phase)	= TF-379 = 1290 ± 95 B.C.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Pandu-Rajar-Dhibi, West Bengal

Chalcolithic period (Pd. II)= YU = 1012 ± 120 B.C.

Paiyampalli, Tamil Nadu

Neolithic period = TF-349 = 1485 ± 100 B.C.

Noh, Rajasthan

Painted Grey Ware (Iron Age) = UCLA-703B = 821 ± 226 B C.

Niai Buthi, Baluchistan

Kulli associations = P-478 = 1900 ± 65 B.C.

Nevasa, Maharastra

Chalcolithic, Jorwe phase = F-40 = 1253 ± 113 B.C.
Chalcolithic, Jorwe phase = P-181 = 1249 ± 125 B.C.

Lothal, Gujarat

Harappa pd. IA = TF-136 = 2080 ± 135 B.C.
Harappa pd. IIIB = TF-22 = 2010 ± 113 B.C.
Harappa pd. V = TF-135 = 1555 ± 130 B.C.
Harappa pd. V = TF-19 = 1809 ± 140 B.C.

Loebanr I, Swat Valley

Chalcolithic Period I = British Museum Lab. = 1520 ± 150 B.C.
Iron Age : Period II = British Museum Lab. = 1030 ± 150 B.C.
Period III = Rome Lab. = 510 ± 50 B.C.
—do— = 430 ± 50 B.C.

Kile Gul Mohammad, Baluchistan

Pre-pottery Neolithic = P-524 = 3688 ± 85 B.C.

Kalibangan, Rajasthan

Pre-Harappan pd. = TF-155 = 2371 ±118 B.C.
Harappan pd. = TF-160 = 2236 ± 103 B.C.
Harappan pd. = TF-152 = 1773 ± 88 B.C.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Hallur, Mysore

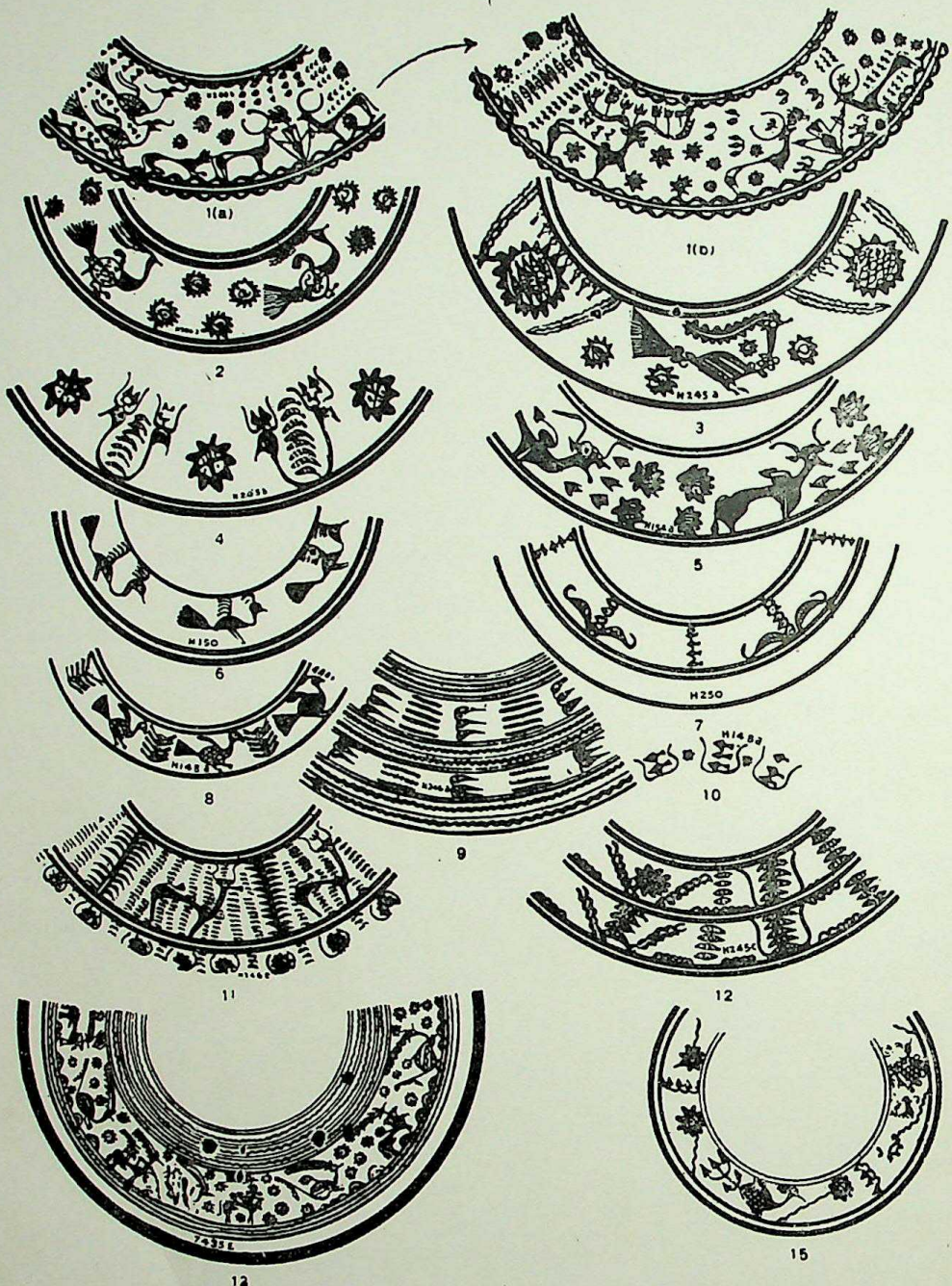
Neolithic, layer 14	= TF-58 = 1710 ± 105 B.C.
Chalcolithic, layer 5	= TF-575 = 1030 ± 103 B.C.
Early Iron Age, layer 4	= TF-570 = 1105 ± 108 B.C.

Chandoli, Maharastra

Chalcolithic	= P-473 = 1330 ± 70 B.C.
Chalcolithic	= TF-43 = 1042 ± 103 B.C.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Painted panels of mythological scenes depicted on burial jars from Cemetery H (after Vats)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX II

HARAPPA, CEMETERY 'H' : PAINTINGS ON BURIAL JARS

There are at least half a dozen burial jars, recoverd from Cemetery H, Stratum I, with painted panels containing composite figures of men and animals. Vats[1] and Shastri[2] took special interest in the painted panels because of their supposed mythological meaning. Here a brief description is given of these panels painted on one particular jar (No. H 206 b) since they have been taken as the most vivid representations of the Vedic mythology concerning the journey of the dead to the World of the Souls.

Panel No. 1 contains a standing composite figure on a wavy line. The figure has its lower portion of a human being and the upper portion of a beaked bird with flowing hair. The figure, holding an arrow mounted on a bow, is shown securing with the help of a rope two bovine animals, one each on its left and right. Further, a hound is shown attacking one of the animals from behind. Two flying peacocks are represented at the back of this party.

Panel No. 2 repeats the same composition with only two modifications : (i) the hound and the tail of the attacked animal are missing, and (ii) the flying peacocks are sitting on the wavy line.

Panel No. 3 shows an imposing goat with long curved horns decorated with several tridents.

Vats has identified the important elements of the composition as follows : (a) the composite figure is the spirit-body of the dead, (b) the beaked head is of a peacock, (c) the bow-and-arrow belonged to the dead man, (d) the bovine animals are either bulls or cows, (e) the wavy lines represent the terrible river Vaitaraṇī, (f) the hound is the dog of Yama, (g) the peacocks are the sacred birds which carry the spirit-body to the world of the souls, (h) the goat is the guide and path-finder, (i) the tridents

1. Vats, M. S., *Excavations at Harappa*, vol. I, p. 237.
2. Shastri, K. N., *New Light on the Indus Civilization* vol. II (Delhi 1965), pp. 12-32.

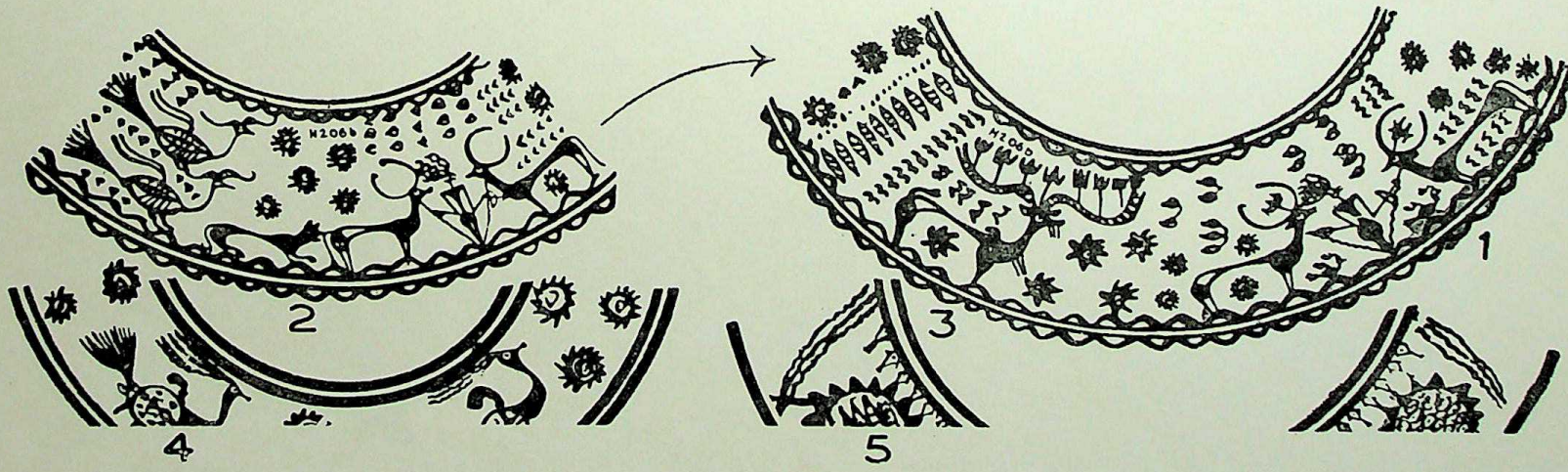
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

are the symbols of triumph, and (j) the circles, dots and stars are the celestial elements of the solar world.

The legend that the panels are supposed to convey is as follows :

Soon after the death of the person the survivors gave away two bulls or cows as a gift to a priest, or else, the two animals were sacrificed. That the dead was a soldier is identified by bow-and-arrow in the hands of the central figure. The dead in his new body (the subtle body or the Sūkṣma Śarīra) is shown crossing the Vaitaraṇī with the help of two bovine animals. Thereafter, the party was attacked by the dog of Yama, the Lord of Death. The tail of one of the animals was completely bitten off. After passing through these ordeals of the Vaitaraṇī and the Yama's dog, which the dead encountered in his journey through the darkness. the dead was successfully led to the solar world—an event symbolized in the majestically standing goat with tridents.

The overall picture tallies with the popular Hindu mythology based on the Vedic sources although one may point out a few ambiguities, e.g., the wavy line is not only at the feet of the dead but also above him, and, may represent only a decorative device ; the so called celestial elements are distributed in all the three panels and therefore the concept of darkness and the goat as the path-finder may not be correct ; the peacocks while shown in the panel no. 1 as flying but depicted as sitting on the wavy line in the next panel may not be the faithful portrayal of the popular legend. It is, afterall, quite possible that the Vedic legend itself picked up some elements of the traditional accounts of the Ravi (Cemetery H) people. I am not convinced that the panels on this jar and on a few other jars are as Vedic in origin as Shastri would expect us to believe.



Figures. 1, 2 and 3 *depict the mythical journey of soul from earth to heaven*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

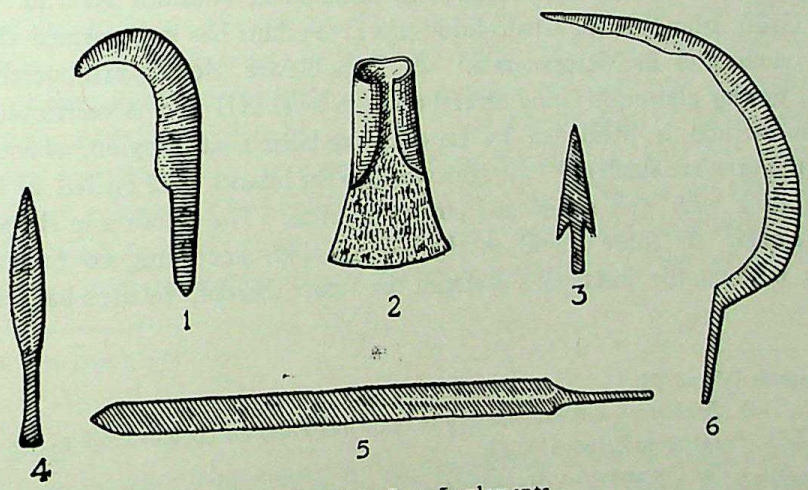
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX III

IRON IMPLEMENTS IN PENINSULAR MEGALITHS: SOME PARALLELS IN LA TENE ASSEMBLAGE

Dr. Allchin has already prepared a fairly comprehensive list of objects associated with Indian megaliths which have parallels at a number of sites in Westetn Asia and Arabia[1]. The iron objects are, however, not included in it. V. D. Krishnaswami had once asked me to look up for their parallels in the La Tene Collections in Switzerland. During my visit to that country in 1963 I came across a few objects which do show some formal similarities with a few of our objects. They are dated to the later half of the Ist millennium B.C., the period of greatest popularity of megalithism in India.

The iron objects in the La Tene Collection which show similarities with Indian objects are swords, sickles, bill-hooks, hoes, spearheads, scissors, tridents, etc. (see figures). The purpose in quoting these items is only to show the parallels, and not to press any idea of generic relationship between the La Tene and Indian objects. I have, however, been prompted to do it on two grounds: firstly, the chronological brackets of the two complexes overlap admirably and, secondly, I am in agreement with Glyn Daniel so far as he feels that the 'megaliths do not represent a single unitary movement but contacts along the same route over many centuries'[2], which means, the contacts, if any, between Indian megalithic and La Tene collections could have taken place at any time during the later half of the Ist millennium B.C. It is, therefore, clear that although more positive proof is needed to correlate the objects from the two complexes, the parallels noticed seem to me quite interesting.



La Tene Iron Implements

1. Allchin, B. & R. *Birth of Indian Civilization*, pp. 229-30.
2. Daniel, Glyn, *The Idea of Prehistory*, p. 100.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX IV

CHALCOLITHIC URN BURIALS : PARALLELS IN WEST ASIA AND TRIBAL INDIA

Single, Double or Multiple urn or jar burials below the habitational floors have been reported from a large number of Chalcolithic and Neolithic-Chalcolithic sites in India.[1] The cultural contacts of these sites with several sites in Western Asia have been visualized by Prof. Sankalia.[2] The question, therefore, often asked is : whether the practice of habitational urn-burials in India has also to do something with the West Asian sites or not ?

E.O. James has observed that "throughout the Ancient East.....despite marked differences in climate and economic conditions and in respect of the social and religious structures there was a uniformity of procedure in the burial of the dead, and in the funeral ritual and equipment."[3]

It is well known that this practice was common in Western Asia as well as in Egypt and Greek Islands in the Chalcolithic times. Perkins has summarized the results of several such sites in Mesopotamia.[4] At Tepe Gawra "double-urn burial, with the joint sealed by clay plaster, is found several times in level XII and is restricted to that level. This method is paralleled by Late Kassite burials at Babylon, where even the profiles of the urns are similar."[5] At Nineveh also the infants were buried in burnished grey ware urns with wide mouth and out-turned rims. The colour and shape of these urns are similar to those found in the Deccan but, according to Sankalia, 'this may mean nothing, for inserting a skeleton, or a part thereof, the urns had to be wide mouthed.'[6]

---

1. See Chapters IV and VI.
2. Sankalia, H.D., *Prehistory and Protohistory in India and Pakistan* (Bomb. 1962) p. 281.
3. James, E.O., *Prehistoric Religion*, p. 57.
4. Perkins, A.L., *The Comparative Archaeology of Early Mesopotamia* (Chicago, 1963)
5. *Ibid.*, p. 71.
6. Sankalia, H.D., *From History to Prehistory at Nevasa* (Poona, 1960), p. 501.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

At Tepe Gawra 'a fractional inhumation with one or both the tibiae missing' has also been recorded.'[7] It recalls the extended adult burials at Nevasa, Chandoli, etc. in which bones below the ankles are found missing. It is significant to note that similar to Indian sites, at Gawra 'grains and bones for food are never found with urn burials and seldom with any burials of infants and children.'[8] It is equally important to mark that at Gawra 'the body is invariably contracted. A few fractional burials may only be disturbed burials.'[9] Mallowan recovered two 'Double Burials' and a few fractional burials at Tell Arpachiyyah and felt that they have some connections with the similar practices in India although Perkins does not subscribe to this view.[10] At Hassuna also from level I B upward 'a dozen infant burials in pottery jars' have been recovered.[11]

In Iran, at sites like Sialk and Hissar, however, the customary modes of burial were, by and large, flexed and extended (sometimes fractional) in regular cemeteries. The evidence of house-burial is extremely meager at the moment. Lamberg-Karlovsky has recently discovered them in the Neolithic levels of Period VI (mid-late fifth millennium B.C.) of Tepe Yahia, about 250 Km. south of the town Kerman. He observes : "Human burials, all of infants, were found under the floor in a few of the structures. The limbs of the bodies had been tightly gathered to the trunk before burial, and accompanying the bodies are unbroken coarse-ware bowls."[12] Prof. James, however, feels that the practice of fractional burial in India might have been introduced from Iran.[13]

This brief survey of burial practices in West Asia brings out one thing very clearly : the custom of burying the dead body below the habitational levels in single or multiple urns was an age old practice in Mesopotamia and Iran, and it *could have come* to Baluchistan and the Deccan by way of '*coastal migration of ideas.*' In Baluchistan, however, cremation was more popular than inhumation, and to that extent Baluchistan may not completely be equated with the Deccan. There is one more snag. One can easily see a big time and space gap between the examples in Western Asia and India, and only future excavations may reveal the truth of contacts, if they were at all there.

---

7. Perkins, *op. cit.*, p. 71.
8. *Ibid.*
9. *Ibid.*
10. *Ibid.*, p. 72.
11. Lloyd, Seton and Safar, Fuad, *Journal of Near Eastern Studies*, vol. IV (1945), p. 267.
12. Lamberg-Karlovsky, C. C. and Martha, "An Early City in Iran", *Scientific American*, vol. 224, No. 6 (June 1971) p. 103.
13. James, *op. cit.*, p. 51.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

APPENDIX V

GULF OF OMAN : THE ORIGINAL HOME OF INDIAN MEGALITHS

THE PROBLEM

The problem of the original home of Indian megaliths has long been baffling the scholars. This is so in spite of the fact that most of the evidences point to their original home beyond the western borders of Afghanistan. The reasons for this difficult situation are primarily three :

(i) The typology of the megalithic monuments in India, as well as in the western countries, is extremely varied, so much so that we do not get all of the types at a single site or even in a single geographical or political zone ; in fact, in every country there are several local types.[1] (ii) The grave-offerings in the megaliths outside India are also varied and we do not get in any country the repertoire similar to that found in India, although the parallelism of individual objects have been noticed in areas from Yemen to the Aral Sea and beyond.[2] In fact, each country has its own culture-complex associated with its megaliths. (iii) During the last two or three decades, most of the Western writers, and following them the Indians, have confined themselves to the consideration of those megalithic sites which are chronologically bracketed between 3000 B. C. and 1500 B. C.

---

1. Krishnaswami, V. D., "Megalithic Types of South India", *Ancient India* (hereafter abbreviated as *AI*), no. 5 (1949), pp., 35-45; Daniel, Glen, *The Idea of Perhistory* (Pelican books, Harmondsworth, 1964); Childe, V. Gordon, "Megaliths", *AI*, no. 4 (1947), pp. 4-13.

2. Soundara Rajan, K. V., "Megaliths and Black-and-Red Ware", *Seminar Papers on the Problem of Megaliths in India*, Memoirs of the Department of Ancient Indian History, Culture and Archaeology, no. 3, Banaras Hindu University, Varanasi, 1969 (hereafter abbreviated as *SPPMI*, pp. 76 ff; Ramchandran, K. S. "Megalithic Rock-out caves and their parallels outside India", *SPPMI*, pp. 59 ff; Dikshit, K. N., "The Origin and Distribution of Megaliths in India", *SPPMI*, pp. 5 ff; Allchin, B. and R., *The Birth of Indian Civilization* (Pelican books, Harmondsworth, 1968), pp. 229-30; Leshnik, L. S , "Early Burials from the Nagpur District, Central India", *Man*, vol. 5, no. 3, pp. 498 ff.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Obviously, these sites were either of the Neolithic period or of the Bronze Age.[3] Since the Indian megaliths belong to the Iron Age, the beginning of which was placed by Wheeler in the Achaemenian period,[4] a gap of thousand and odd years was repeatedly stressed by these writers. Obviously, the solution was nowhere in sight.

In the meantime another thread was picked up by Gordon who hinted at the possible relations between the southern Arabian cairn-burials and Baluchistan cairn-burials of the Iron Age.[5] This view was reiterated by the present writer.[6] It was, however, not accepted by some scholars, including Banerjee,[7] who connected the Baluchi cairns with the Indian megaliths generically.[8] At the same time Heine-Geldern connected the Baluchi cairns with the Caucasian megaliths and the stone slabed graves of Tepe Sialk.[9] Recently, Leshnik has elaborated the Central Asian theory.[10] What is important to remember is that while Wheeler, Childe, Haimendrof,[11] etc., did not at all consider the Baluchi cairns as a link with the megalithic monuments of India, Banerjee, Heine-Geldern and Leshnik looked upon them as the immediate source of the Indian megaliths, including those in south India.

A SUGGESTION

It is difficult to believe that the Baluchi cairns or the Central Asian cists or cairns or barrows gave rise to the south Indian megalithic complex. On the other hand, it is strongly felt that the Baluchi cairns were generically related to the south Arabian cairns of the Iron Age. Of late, it has also been felt that the areas around the Persian Gulf or the Gulf of Oman may provide the key to the problem relating to the origin of the Indian megaliths. Belonging to the Early Iron Age of the

---

3. Childe (1947), *op.cit.*, Haimendorf, F., "The Problem of Magalithic Cultures in Middle India", *Man in India*, vol. XXV (1945), pp. 73-86; Wheeler, R. E. M., "Brahmagiri and Chandravalli 1947.....", *AI*, no. 4 (1947), pp. 181-308; Krishnaswami (1949) *op. cit*; Srinivasan K. R. and Banerjee, N. R., "Survey of South Indian Megaliths." *AI*, no. 9, (1953), p. 108.

4. Wheeler, R. E. M., *Early India and Pakistan* (London, 1960), p. 24.

5. Gordon, D. H , *Prehistoric Background of Indian Culture* (Bombay, 1958), p. 18.

6. Mishra, V. N. and Mate, M. S. (Editors), *Indian Prehistory* : 1964 (Poona, 1965), p. 205.

7. *Ibid.*, p. 214.

8. Banerjee, N. R. *The Iron Age in India*, (New Delhi, 1965), pp. 42-49,

9. *Ibid.*, p. viii, foreword.

10. Leshink, *op. cit.*

11. Haimendorf, *op. cit.*

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

first millennium B.C., we have in that region, besides cairn burial, severals types of sepulchral monuments,[12] the plans and the construction of which are reflected in the Indian peninsular magaliths whose traditions go back to the early Ist millennium B. C. Thus, south-eastern Arabia, with its outlet in the Gulf of Oman, may be taken as the epicentre of the Baluchi cairns as also the peninsular Indian megaliths. It was in the islands in the Gulf of Oman that several traditions from Palestine, Mesopotamia, southern Arabia etc., came mostly along with traders, and got fused; the graves discovered in south Arabian sites have actually yielded items from these regions. Thus, through the natural outlet of the Gulf of Oman, the people seems to have moved out eastward following the traditional sea-route along the Makran coast. Following Glyn Daniel's[13] theory that in their diffusion the megalith builders often followed the same route repeatedly, over a long period of time, we would like to suggest that at one time, along the Makaran route, the megalithic tradition travelled up to the Western Ghats of India and at another time the cairn-burial tradition travelled to Baluchi Makran, and Sind, may be upto Kutch and Saurashtra, along the same route. In both the movements, the traditions moved into the hinterland, from the south to the north. We do not visualize the voyage across the high seas from the Gulf to the Western Ghats, although its possibility cannot completely be ruled out. While moving in the interior of different regions, these people seem to have come into contact with the local people, as also others who themselves might have been coming from elsewhere. Thus, we may visualize the possibility of the Baluchi cairn builders occasionally coming into contact with the West Asian and Central Asian peoples and borrowing from them certain material items and spiritual ideas. Similarly, we can also visualize hybridization of the original ideas with those locally prevalent ones, leading to the new modified forms of the sepulchral monuments as also the mode of the disposal of the dead. However, *we do not have sufficient evidence as yet to connect the Baluchi cairn with either the Vindhyan or the peninsular (Indian) cairns generically*, although, as Wheeler says, 'ideas have wings' and they might have travelled into these lands in a casual way but it is beyond our comprehension.

With this much of theoretical background regarding our theory, we come to the actual archaeological evidence in southern Arabia and Persian Gulf islands.

DATA

The explorations and excavations in these regions have brought to light the following types of sepulchral monuments, all datable between 1000 B. C. and A.D. 100.

---

12. Bowen R. L., *Archaeological Discoveries in South Arabia* (Baltimore, 1958); Bowen, R. L. Jr., *The Early Arabian Necropolis of Ain Jawan* (New Haven, 1950); Bent, T., *Southern Arabia* (London 1900).

13. Daniel, *op. cit.*, p. 100.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

These are cairns, cairn-circles, rock-cut caves, menhirs, barrows, triliths, tumuli, terra-cotta sarcophagi, cists, etc. Some of these monuments bear Himyaritic inscriptions going back to 1000 B. C.

CAIRNS, CAIRN-CIRCLES AND CAIRNS WITH MENHIRS

In southern Arabia, we come across several types of cairns, e.g., round, oval, square and rectangular. Along the southern shore, at sites like Ras Result, the "larger ones measured 6 to 12 metres in diameter and reached a height of about two-thirds of a metre above plain. Around the larger graves were smaller ones looped to their circumference".[14] Thc cairns, in a large number of examples, were 'cairn-circles', i. e., they were surrounded by either a single chain or double concentric chains of big boulders. It is important to note that in areas like the Hajar province of Hadhramaut a cairn is marked by a free standing menhir in its centre.[15]

It is significant to mention that many of these types of cairns are found in Iran and India; round and oval types have been reported from sourhern Iran, Baluchistan,[16] Gujarat,[17] the Vindhyas[18] and the whole of the peninsula;[19] square and rectangular cairns

---

14. Bowen (1958), *op. cit.*, pp. 134-35. Also see, *Journal of the Bombay Branch of the Royal Asiatic Society*, vol. III, pts. I and II (1847-1856), pp. 262-63.

15. Bowen, *op. cit.*, p. 134. See also, H. Ingram, "Excursion into the Hajr Province of Hadhramut," *The Geographical Journal* (abbreviated *GJ*) no. 98, 1941, pp. 124 ff.

16. Gordon, *op. cit.*, p. 156.

17. Rao, S. R., "Excavations at Amreli." Bulletin, Museum and Picture Gallery, Baroda, (abbreviated *Bull. MPGB*), vol. XVIII (1966). The excavated site is Amreli. Rao kindly informs me that in central hilly regions also there are some sites. J. P. Joshi has also discovered at least nine cairns in Kutch at Sayakhan-ni-Wandh. They are circular in shape, about 2 metres in diameter. These rubble heaps were noticed on the slope of Nilwa Hills. (*IAR*-1967-68, p. 16.)

18. Carlylle, A. C. L., "Report on a Tour in East Rajaputana in 1871-72 and 1872-73", *Annual Report, Archaeological Survey of India*, vol. VI, pp. 13-15, 33-39, 88-89, 104-108.

19. Aiyappan, A., "The Megalithic Culture of South India" *Indian Science Congress Association*, vol. XXXII (1945), Presidential Address.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

have been located in southern Iran,[20] and Sind,[21] and the Vindhyas;[22] and the cairns with menhirs have been discovered in Madhya Pradesh.[23]

ROCK-CUT CAVES AND BLACK-AND-RED WARE

In Hadhramaut, Aden Protectorate, on Wadi, 'Amd, opposite town Hureidha, there are a number of rock-cut tombs in the scree-slopes of the valley cliffs. Two of these graves—A5 and A6—have been excavated by Caton Thompson. They turned out to be round chambers with rock-cut benches along the cave walls. Tomb A5 yielded the skeletal remains of 42 individuals and a large quantity of grave-goods, kept in small groups over the floor as well as on the benches. The offerings consisted of 87 earthen pots, several beads, and a number of bronze and iron-bronze objects.[24] A6 yielded the bones of three persons, beads, earthen pots, a pair of seals, etc.[25] According to the excavator, following the opinion of Beck, the beads are of Eastern Mediterranean type of the 6th century B. C. and the seals are of the Achaemenian type.[26] Harding, on the other hand, dated the pottery to the 9th century B. C. He discovered similar pottery at Adiat-al-Sultan, in Eastern Aden Protectorate. The same pottery was again found in the lowest levels of Hajar-bin-Humaid, dated to the 9th century B. C. by C-14 method.[27] It appears, therefore, that the graves belong to the Ist half of the Ist millennium B. C. In connection with the offerings Thompson has made another significant observation; "...caravan or coastal traffic may have brought them (i.e., beads, seals, etc.) from the Persian Gulf."[28] Clearly, the Persian gulf was on the regular trade route between southern Arabia and the countries of Western Asia.

---

20. Lamberg-Karlovsky, C. C., "The Cairn Burials of south-eastern Iran", *East and West*, NS, vol. 18, Nos. 3-4 pp. 269-76. The important excavated sites are Sari-i-Asiab, Fanuch, Tump-i-Gabraha, etc.

21. Raikes, R., *Archaeological Explorations in Southern Jhalawan and Las Bela*, (Rome, 1968), pp. 156 ff. The sites are Jeman Goth, Kanar, etc.

22. Singh, P., "Megalithic Remains in the Aravalis", *Puratattva*, vol. 2 (1968-69). pp. 46-48. See also, G. R. Sharma, *IAR*-1962-63, p. 41; *IAR*-1963-64, p. 57. The important sites are, Satmas, Dausa, Kotia, etc.

23. Deo, S. B., "Megaliths in Maharashtra", *SPPMI* (1969), pp. 27-56. Dhanora is the typical site for such monuments : *IAR*-1956-57, p. 35.

24. Caton Thompson, G., *The Tombs and Moon Temples of Hureidha (Hadhramaut), South Arabia* (London, 1944), p. 65. See also, F. Stark, "An Exploration in the Hadhramaut and Journey to the coast", *GJ*, no. 93 (1939), pp. 7 ff.

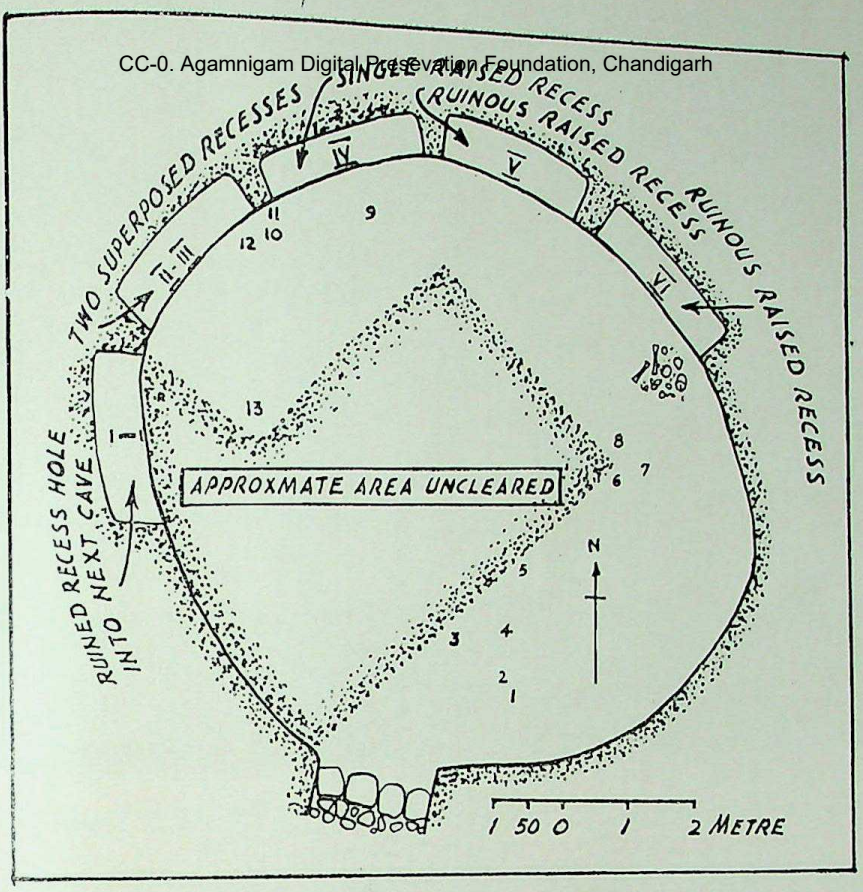
25. *Ibid.*, p. 103.

26. *Ibid.*

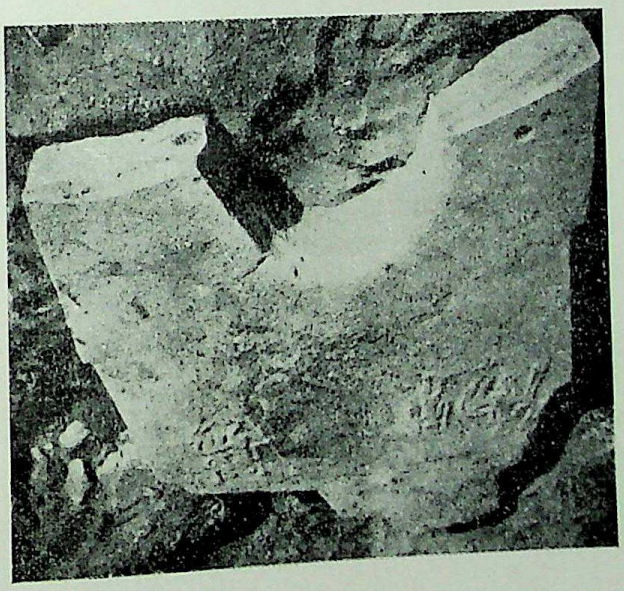
27. Harding, G. L., *Archaeology in the Aden Protectorates*, (London, 1964). p. 31.

28. Caton Thompson (1944), *op. cit.*, p. 103.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

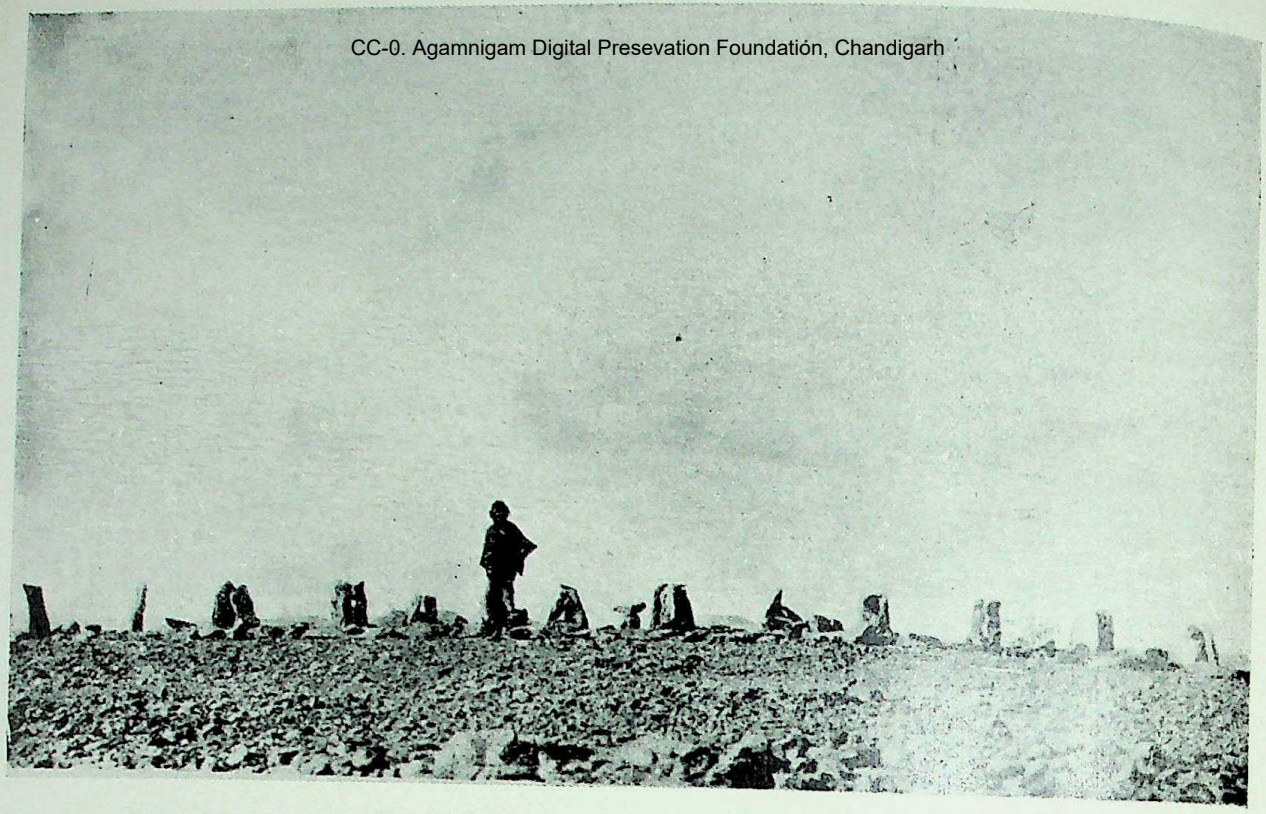


Plan of a rock-cut tomb (No. A 6) at Hureidha (Hadhramaut) *after G.C. Tompson* (See page 326)



Broken slab with port-hole from a round-tomb structure at Hili in the Buraimi oasis of Abu Dhabi *after Fig. 1 published in Kuml 1966*, (See page 329)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



A cemetery in northern Jol consisting of a large number of 'criliths', *after R.L. Bowen* (See page 329)

A terracotta bath-tub type sarcophagus of Neo Babylonian time from Bahrain, *after P.V. Glob, in Kuml*, 1956, fig. 5 (See page 328)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

There has been another interesting discovery in the Hadhramaut Wadi at Mashgha. Here a big pot-sherd was found which was "red to black on the outside and black in."[29] The black-and-red ware might have come from Palestine.[30] In the Indian context it is associated with the cultures ranging from the Harappan period to the megalithic.[31] It may not be out of place to mention that Egypt had this ware at the grave sites of Tumas, etc., of the 2nd millennium B. C., i.e., in the porotohistoric times,[32] and Palestine might have got it from there. This Egyptian black-and-red ware of 'C' Group people of 2000-1000 B. C. also moved in Ethiopia[33] and it is equally possible that South Arabia got it from this country which was quite near. Although, I am not in a position to suggest that India learnt the technique of producing black-and-red ware from Egypt, or Ethiopia or southern Arabia, yet, as Sri B. B. Lal has very pertinently pointed out to me, in a personal discussion with him, that it may not be without significance that the black-and-red ware is found confined to a rather homogeneous land curve that may start from Egypt and fall in south India; it is not found in any other region of the ancient world.

In connection with plain pottery Allchin may be quoted: "Legged urns identical to Indian types are reported from the Yemen."[34]

In the Jebel Sot region, D. vander Meulen has made two important discoveries. One was a series of "well cut square columns of stone, about 1·2 metre high, and linked

---

29. Harding (1964). *op. cit.*, p. 42.

30. I have personally seen a few black-and-red ware sherds in the University museum of Jerusalem (Israel) in 1963. I was told that they belong to late chalcolithic period of Israel, but none could tell me anything about the site from which they came.

31. Lal, B. B., "From the Megalithic to the Harappa: tracing back the graffiti on the pottery", *Ancient India*, no. 16 (1960), pp. 4-24.

32. Lal, B. B., *Indian Archaeological Expedition to Qasr Ibrim, Nubia.* 1962 (Cairo, 1967), Published by the Department of Antiquities of Egypt. On page 117 he writes : "Again, it is probable, though not proved that there may be some link between the C-Group culture of Nubia and Megalithic south." Black-and-red ware, also called as black topped ware. hes been found in Egypt from 4000 B. C. onwards (e. g., at Naqda). See also, *IAR*-1961-62, pp. 66-70.

33. Dikshit, K. N., "On Origin and Distribution of Megaliths in India, " *SPPMI*, p. 10. He quotes Dr. H. Straube of the Inst. of Ethnography, Cologne, for this information. Straube has himself explored this pottery in Ethiopia. See also, Azais, R. P. and Chambrd, R., *Cinq Anneis des Recheres Archaeologius en Ethopie*, (Paris, 1931). Quoted by Dikshit.

34. Allchin, B. & R., *The Birth of Indian Civilization*, p. 230.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

up two of these were flat stones set in a rectangle".[35] The other was a series of open rings of upright slabs.[36]

It may be pointed out that such menhirs have been reported from Asota in Baluchistan to the central regions of Kerala,[37] and slightly similar table stones have been brought to light in the tribal belt in eastern India.[38] The 'open rings of upright slabs' remind us of the 'Hood Stones' from Kerala. It may, however, be made clear that the east Indian 'Table Stones' are likely to have been related with the south-east Asian complex and not the Western complex since the prehistoric cultures of eastern India had always the south-east Asian bias.[39]

TERRACOTTA SARCOPHAGUS

Terracotta sarcophagi, sometimes with anthropomorphic lids (e. g., at Sankarvaram) and sometimes without legs (e.g., at Maski) have been reported inside and outside the megaliths from Kerala to Tamil Nadu. Since such pottery coffins were not in use in India in the pre-Megalithic context, it has repeatedly been suggested that it came from Western Asia : in Mesopotamia it was in use from 3000 B. C. (at Baghadad[40] several oblong and short legged sarcophagi were found); in Palestine its use has been attested to even in the Iron Age (at Beth Shan and other places they are dated to 1200 B.C.); in Egypt its tradition goes back to the chalcolithic times, but it is important to note that Cananites used them even in 900B.C.[41] It may also be pointed out that this tradition was alive even in the Persian Gulf round about 900 B.C. Glob excavated one such sarcophagus in the Bahrain island. It belonged to the Neo-Babylonian times and it yielded three arrowheads and one dagger of iron, seven rings of copper, a seal of stone, etc.[42]

---

35. Meulen, D. Van der, "Aden to Hadhramaut and Journey to the Coast", *GJ*, 93 (1939), pp. 122-23. See also, Bowen (1958) *op. cit.*, pp. 134-35.

36. *Ibid.*

37. Gordon, *op. cit.*, p. 183.

38. Haimendorf, C. von. E., "Megalithic ritual among the Gadabas and Bondos of Orissa", *Journal of the Asiatic Society of Bengal* (abbreviated *JASB*), vol. IX (1943), pp. 149-87.

39. Krishnaswami (1949), *op. cit.*, p. 40.

40. Jones, I. N. and Hall, J., *Jr. Bom. Branch of Royal Asiatic Society*, vol. IV (1853), p. 378.

41. See for details, Dikshit, *op cit.*

42. Glob, P. V., "A Neo-Babylonian Burial from Bahrain's Prehistoric Capital", *Kuml* (1956), fig. 5.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

TRILITHS OR 'TOPI-KALS' (?)

In northern Jol, Meulen has reported another interesting discovery, that of a 'trilith'. It "consisted of three long stones, about a metre high, standing on end and leaning towards each other. Sometimes a trilith had a fourth small stone on top. Occasionally, a series of triliths was enclosed with an elliptical line of pebbles."[43] In the interior of Oman, Thesiger has reported a number of triliths and tumuli in some sites on the banks of Ithli, in wadi 'Amairi, near the western end of Jebel Salakh and Andam.[44]

A trilith is not identical with a '*topi-kal*', which has four stones, but those with cap-stones and stone-circles might have inspired the form of a *topi-kal*.

CISTS AND JAR BURIRLS

In the island of Qatar, Glob explored a cemetery of about 50 cairns usually measuring ten metres in diameter and one metre in height. He opened one of these cairns and found 'a stone cist with roofing slabs, surrounded by smaller boulders. The cist lay in a north south direction and was cut down into bed-rock.'.[45] It measured 1·9 metres in length. The monument seems to belong to the middle of the 2nd millennium B.C., i.e., the latest phase of the chalcolithic culture of the island.

Interestingly enough, on a rock nearby, hundreds of 'cup-marks' were found. According to the excavator they 'undoubtedly represent the female sexual characteristic'.[46] While interpreting the cup-marks on the circle-stones of Junapani, Rivet-Carnac compared them with the Morse code.[47] Such cists, cairns and cup-marks are known to us from the Vindhyas to the Deccan.

It may also be mentioned that at places like Ras Abaruk and Mezru'ah in the island the graves continued to be erected till the 3rd century B. C. They have yielded iron swords and arrowheads, glass objects, pot-sherds of the early Seleucid period, etc.[48]

---

43. Bowen (1958), *op. cit.*, p. 135.

44. *Ibid*; see also, B. Thomas, *Arabia Felix* (London, 1932), p. 126; See also, W. Thesiger, "Desert Borderlands of Oman", *GJ*, no. 116 (1950), p. 153.

45. Glob, P. V., "Prehistoric Discoveries in Qatar", *Kuml* (1957), p. 177.

46. *Ibid.*

47. Rivet-Carnac, J. H., "Prehistoric Remains in Central India", *JASB*, 1879, vol. XLVIII, pp. 1-16.

48. Madsen, H. J., "Arabian Gulf Archaeology", *Kuml* (1964), p. 104.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In the Bahrain island, along the north coast and outside the extensive Bronze Age cemeteries, there are a large number of cairns and barrows of the Iron Age. Tumulus no. 36/2 is their typical example. It was oriented east-west and it contained the secondary remains of an adult and a child along with a silver bracelet, iron dagger and knife.[49]

At Ras-al Matbakh a large jar burial has also been reported.[50]

Allchin writes: "Stone cist graves, with or without port-holes, are found in the Levant and on the coasts of Arabia."[51]

SOME TOPOGRAPHICAL OBSERVATIONS

About the topographical setting of the megalithic cemeteries in south Arabia Phillby has made some very significant observations since most of them are equally applicable to the setting of Indian megalithic grave-yards. He writes: "the evinence of more plentiful water in these parts in ancient times argues the presence of a large agricultural and pastoral community in the vicinity of the cemeteries those days, while the analogy of Kharj province accounts for the burials on higher ground away from the habitation ...I would offer a suggestion that in them we have a link with the Phoenicians of old."[52]

The south Indian megalithic sites are also generally found situated near tanks and on a higher ground, away from the habitation. Similarly, the types of iron tools from the graves also prove that the people were partly nomadic-pastoralists and partly agriculturists. However, we may or may not agree with the Phoenician theory of Philby.

THE CAMEL VIS-A-VIS THE HORSE IN MEGALITHS

In one of the south Arabian graves, excavators have discovered the fragmentary bones of the camel.[53] As against this, in some of the Baluchi cairns[54] and Peninsular

49. Bibby, T. G., "Five among Bahrain's Hundred Thousand Grave-mounds", *Kuml* (1954), 139.

50. Madsen (1964), *op. cit.*

51. Allchin, *op. cit.*, p. 230.

52. Phillby, J. B., *Sheba's Daughters* (London, 1939).

53. *Ibid.*

54. Stein, Aurel, "An Archaeological Tour of Gedrosia," *Memoirs of the Archaeological Survey of India*, no. 43, p. 88. In two of the hundreds of cairns at Gatti, the excavator found the skulls of the horse.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

graves[55] fragmentary bones of the horse have been found. Naturally, the question may be raised that if southern Arabia had anything to do with either the Baluchi cairn burials or the peninsular megaliths, why do we not get the camel bones in them? Further, how to account for the association of the horse with the cairn and the megalith builders?

One may place any number of suggestions, alternatives and arguments in favour or against a theory in this regard, but one simple fact need not be forgotten: the two animals have their own habitats, each absolutely different from the other; the camel is a desert animal but not the horse. Obviously, the camel was of no use to most of the people in peninsular India. Moreover, it has repeatedly been pointed out by all the authors that by-and-large, the megalith builders, during the process of their diffusion, took with them what we now loosely call 'megalithism'—i.e., the plan and structure of the monument, the system of collective burial, etc.—and not the culture-complex. If the migration was coastal, which seems to be largely so in the case of megaliths, even the mount, and that too a camel, we not taken to the new region; generally it was hardly feasible. The migrating people adopted the culture-complex and the popular mount of the local people. Moreover, let it also not be forgotten that so far camel bone has been found only in a few graves in south Arabia and, therefore, is not of much statistical value. But then the other question is more significant. How to account for the association of the horse with the Indian megaliths and cairn burials? One of the probable answers may be that the animal in question, both in Baluchistan[56] and in peninsular India,[57] is likely

---

55. *IAR*-1961-62, p. 33; the horse's bones were found in a cairn circle at Junapani, near Nagpur. They were also found in a Similar context at Khapa, near Nagpur. See, S. B. Deo. *Excavations at Takalghat and Khapa* (Nagpur, 1970), pp. 9 and 60-61. At Hallur, Nagarajarao found them in the Megalithic-Neolithic overlap levels of about 1000 B.C. (Allchin, 1968, *op. cit.*, p. 165).

56. Piggot, Stuart, *Prehistoric India* (Pelican books, Harmondsworth, 1952), p. 121. Four teeth of the domestic horse (*Equus caballus*) were found in the lowest levels of Rana Ghundai (RG I), Piggot writes: "Nomadic, horse-riding herdsmen using the sites as a camping-ground are suggested by the finds in RG I; an infant's skeleton was also found buried at this level." Zeuner, of course, feels that these teeth may be of hemiones (half-ass).

Horse skulls were found in two of the Iron Age Cairn burials of Zangian. On the contemporary Londo Ware pots, from sites like Shami Damb, Gushanak, Bit Damb of Bhagawana, Londo, the horse and horse with a rider (at Gushanak) have been found depicted in painted designs on pots.

57. From the upper levels of Mohenjodaro the horse's bones have been reported. From Lothal, as also one from Mohenjodaro, a terracotta figurine has been identified as the representation of the horse. Zeuner feels that the animal may be onegar, i.e., wild ass, still found in Gujarat.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

to have existed prior to the newcomers. If so, the migrating people simply made greater use of this animal than hitherto. It is possible that the people were inspired to do it because of two reasons: firstly, their coming into contact with the Iranian and the Central Asian hordes while moving hinterland in Baluchistan, and secondly, the compelling necessities of a nomadic people on the march.

However, the existence of the domesticated horse in India prior to 1000 B.C., i.e., in the Harappan, Chalcolithic and Neolithic times, has as yet not been convincingly proved; at least the archaeological evidence quoted so far is far from conclusive.[58] On the other hand, the horse was certainly put into use by the people of Western and Central Asia much before this date.[59] This important evidence leads to two conclusions: firstly, at least a few groups of the cairn builders of Baluchistan as well as the megalith builders of peninsular India were in close contact with those adept in breeding the horse in captivity. These horse-breeders could be either Iranians or Central Asians. If they were Iranians, they could be from the Fars, as they could be from any other place. We are thinking of the province of Fars in south-eastern Iran because we have a number of cairn burial sites in that region. Secondly, at least one group of the megalith builders may also have migrated along the land-route although the evidence at present is slender.

What could be the land-route through which the horse came to India round about 1000 B.C, ? If it came through the Fars, it could have taken the southern route across southern Baluchistan, Sind, Gujarat and the peninsular region but if it came from northern Iran, i.e., from the region of Sialk, it could have entered into the Zhob valley, Swat Valley, Indo-Gangetic plains and the peninsular region. But such routes are only broadly so; when the diffusion of an important item like the domestication of the horse takes place its movement is more radial than unidirectional. It means, once it came to Baluchistan at any particular place soon it diffused in all directions, covering practically the whole of Baluchistan in a short time. Similarly, when it entered the Indo-Gangetic plains it diffused in all directions quickly. As a matter of fact, it is likely to have entered into these plains from several points in the north as well as in the south. Since the diffusion of the horse must have been the 'Trait Diffusion', i.e., accompanied or unaccompanied by items of material culture, it is not possible at the present state of our knowledge to work out the diffusion of the horse in the context of a particular culture-complex and a particular route.

---

58. Allchin (1968), *op. cit.*, p. 260. By 1700 B. C. the animal was widely in use in this part of the world.

59. *Ibid.*, p. 144.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The megalith-builders, travelling along the Makran coast (which does not mean that they were always in the boats), could have acquired the knowledge of domesticating the horse anywhere in southern Iran; of course, in the present state of research 'where' and 'how' this knowledge was acquired cannot be answered.

This discussion is based on the popularly held assumption that the horse came to India from western Asia. But it should not be forgotten that Arabia has always been famous for the good breed of the horse. But how early it appeared in south-east Arabia is not known although by about 1700 B.C. or slightly later, the horse was known to the Kassites in Babylonia and Syria, the Mitannis on the upper Euphrates, the Hitties in Asia Minor, the Amorite principalities of Palestine and the New Kingdom of Egypt. Zeuner, however, feels that it came to India with the Aryans in the middle of the 2nd millennium B.C. from northern Iran.[60] If it is so, the Megalithic folk were not responsible for introducing the horse in India. But Zeuner's theory is based upon linguistic evidence alone; archaeological evidence does not take back the horse in India prior to 1000 B.C. The introduction of the horse seems to be coeval of the introduction of iron.

STONE CIST IN SAUDI ARABIA

The Danish expedition of 1964 also explored limited area in Saudi Arabia. In the small island of Tarut, about two miles from the town of the same name, Glob and Bibby discovered several stone cists and "around these, and on the surface of the mounds, lay quantities of fragments of alabaster and steatie vessels apparently of first millennium B.C."[61]

CAIRNS WITH PORT-HOLED SLABS IN OMAN PENINSULA

Danish archaeological expeditions in the Oman peninsula have explored a number of round mounds with port-holed and plain megalithic graves of the Bahrain cairn type surrounded by stone-circles of the period between the third millennium B.C. and thirteenth century B.C. The type site is located between villages Hili and Qatara on the northern edge of the Buraimi Oasis which lies about 200 km. hinterland from Abu Dhabi. The corresponding habitation site is securely dated to the period between the

---

60. Zeuner, F. E., *A History of Domesticated Animals* (London, 1963), pp. 318, 332-3.

61. *Kuml*, 1965, p. 150.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

3rd millennium B.C. and 12th century B.C.[62] In the region between Al-'Ain and Jebel Hafit several cairns and tumuli were excavated, some of which have been dated to the 13th-14th centuries B.C. on the basis of a Luristan type bronze sword.[63] It may, therefore, be reasonably presumed that in the Oman peninsula the megalith builders might have lived up to about 1200-1000 B.C. (C-14 date : SM 1113=3196±156 B.P.) It is possible, though not proved, that around 1000 B.C. these people, along with others living in Aden Protectorate as well as round the Gulf of Oman and the Persian gulf, slowly moved out towards the east along the Makran Coast. Halting and marching, imbibing many new elements and leaving behind several old ones, yet holding fast to the practice of megalithism, they reached the Western Ghats of India.

CONCLUSION

The above quoted evidences are based upon the extremely limited explorations and excavations conducted in southern Arabia so far; more work will certainly throw

---

62. Karen Frifelt, "Archaeological investigations in the Oman peninsula, A preliminary report", *Kuml*, 1968, pp. 170-75. The following passages are relevant to our present study.

"At a time when we in Denmark were building dolmens and passage graves, while Egypt was raising its pyramids, the Omam peninsula, too had its megalithic graves." [p. 170].

"Close to the monumental tomb [the one Frifelt excavated in village Hili, the round mound was 12 metres in diameter with 'colossally heavy and unwieldy stone blocks' (stones were generally smoothed on one side) forming a port-holed cairn] at the foot of the mountain of low mounds with potsherds and stone chippings on their tops, some with a single stone slab or so sticking up above the surface, most of them undoubtedly the remains of comparable tomb structures. Even 3-4 kms. to the north, almost buried in the sand dunes which stream in across the plain from the west, the undoubted ruins of a plundered tomb were found." [p. 173]

The ancient habitational mound nearby yielded pottery, steatite pots, seals, etc., terracotta figurines and bronze arrowheads. The pottery (with black linear designs on fine red ware) from the deepest levels were comparable with those found in the Kulli culture of the 3rd millennium B. C. The same ware has also been recovered in the Bahrain island deposits of the same date, and Uman-an-Nar cairns in the island of Abu Dhabi. The same comparison exists in the associated terracotta animal figurines. However, the pottery as well as the parallel slided leaf shaped bronze arrowheads from the uppermost burnt (desertion) layers are comparable to those from the graves of Tepe Guran in Persia which are dated to the 13th century B.C. The date has bee confirmed by two C-14 dates obtained on the charcoal samples from these layers : SM 1114=3403 ±161 and SM1113=3196±156 B.P. [About Tepe Guran excavations, see Tharne in *Acta Archaeologica*, vol. XXXIV, p. 133]

See for more details, *Kuml*, 1965, pp. 149-50, *Kuml* 1966, Fig. 1 on page 75, text on p. 94.

63. *Kuml*, 1964, p. 109.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

fresh light on the problem. In this short space I have tried to put at one place some of the relevant factual data known uptil now. They are fragmentary and expanding. They hardly convey any unified story; what we do not know is much more than what we know. Any one can see that the similarities shown above are extremely distant; there is not a single example where we may have an exact prototype of the Indian megaliths. The caves in the Hadhramaut Valley are round and with rock-cut benches, but they have neither the central pillar nor the central opening, nor the vertical and side entrances, nor the antechambers, etc., of the Indian rock-cut caves of Kerala. The sarcophagi in Baghdad, etc., are hardly so much elaborate with a large number of elephantine legs with holes, vaulted lids, etc., as they are in India. The 'triliths' in south Arabia is much different from the 'topi-kals' of Kerala. The Bronze Age cairns with portals are also not the typical port-holed cists of south India because the former has several arterial galleries within its construction. The black-and-red ware in south Arabia is so far represented by only one example.

Almost similar is the case with the Iranian, Palestinian and Central Asian examples quoted by a few authors. The so called port-holed cists of Sialk are long corbelled structures and not box like structures of the Indian types. The Palestinian examples are so much removed in time and space that they could not be the immediate source of origin for the south Indian megaliths. In typology also a number of examples of the Palestinian group do not find place in India, e.g., double-storeyed cists. The Central Asian examples of cairns, circles and mounds are also far removed in the richness of typology from the south Indian typology.

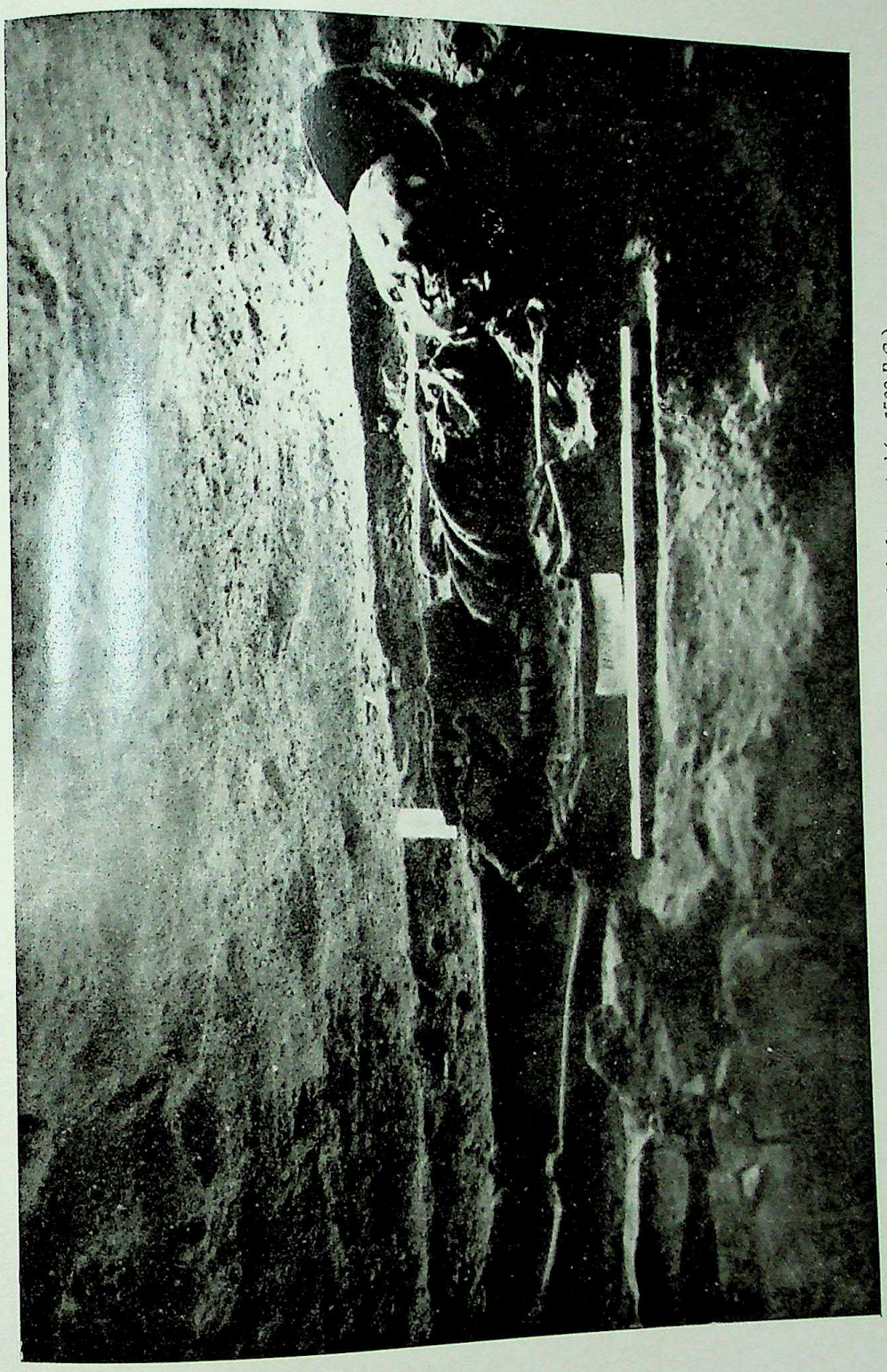
Obviously, one may ask for the grounds on which we correlate the Arabian and Indian examples. To us, they are only of the generalized kind: use of big stones, shapes of the receptacles of skeletal remains, presence of portals, ground-plan of the monuments, black-and-red ware, etc. Long back, Gordon Childe had also pointed out to these generalized similarities.[64] However, *our deductions are extremely tentative* which may be discarded if something positively comes to light against it. But for the present, to us, the evidences appear extremely tempting in favour of the Gulf of Oman theory which seeks the origin of Indian megaliths is southern-eastern Arabia.

---

64. Childe, *AI*, no. 4, pp. 4-14.

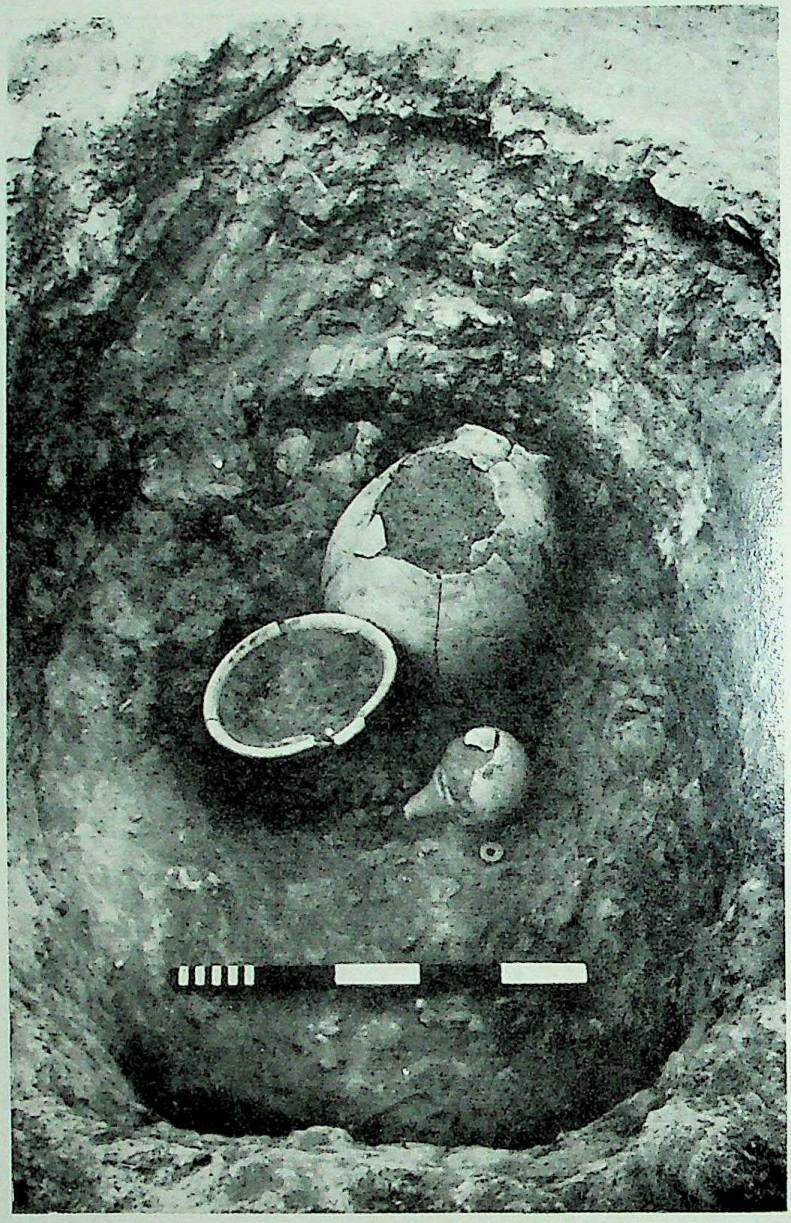
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Barkheda, Extended burial in a rock-shelter, Chalcolithic period (c. 1500 B.C.)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Surkotada, Oblong pit burial with a big central pot ; Harappan period (2100 B.C.)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Post-Script

During the VI Annual Conference of the Indian Archaeological Society held in the University of Kurukshetra in November, 1972, the following new information, relevant to the present study, came to light which I am giving here with the kind permission of the authors.

Surkotada : The monumental Harappan site of Surkotada in Kutch, Gujarat, was excavated by Sri J.P. Joshi on behalf of the Archaeological Survey of India during 1970-71 and 1971-72 field seasons. In all, the remains of habitational activities of three successive periods, from I A to I C (bottom upwards) have come to light. A cemetery, belonging to period I A, was located to the north-west of the town, beyond the huge fortification walls. Since the cemetery was discovered during the last days of the 1971-72 excavations, only four graves could be exposed. All of them belonged to the category of 'pot burials in pits'. First, an oval pit (the longer axis being east-west) was dug to a depth of 30 to 50 cm. and then a few big and small pots were placed inside. Only in one example some very small fragments of human bones have been found; the rest were without any skeletal remains, probably they contained only perishable items of offerings to the dead. The pit was then filled with earth and covered with a cairn of rubble stones. In one example, towards the western end of the grave, a slab of stone was vertically planted in the cairn stones. In another example, a big stone slab was found covering the burial pit. The other graves were devoid of such stone slabs. The grave-goods have been practically nil. The pots included typical Harappan dish-on-stand.

The above details clearly show that at least one type of tomb was slightly different from the known types at all other Harappan sites. The association of a cairn of stones and a stone slab with the graves have come to light for the first time although 'exposure' of the dead body and 'pot burial' burying fragmentary bones are already known from the examples at Kalibangan. In this connection, it may be relevant to point out that belonging to the Chalcolithic period, at Amreli, in Gujarat, pit burials covered with cairn stones have been found earlier. But whether the two sites—Amreli and Surkotada—had any cultural contact or not, cannot be said at the present moment, particularly when very little is known of the former site (chronology and the associated cultural assemblage are virtually unknown).

Barkheda : District Raisen in Madhya Pradesh is known for hundreds of rock-shelters inhabited by prehistoric men. Barkheda is one such shelter which was occupied by the people of the Malwa Chalcolithic Culture. The site was excavated by Prof. K. D. Bajpai, Dr. S.K. Pande and Sri Ramesh Kumar Agrawal of the University of Sagar.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The human burial was found within the living area of the rock-shelter. It was an 'Extended Burial, of an adult, with bones below the ankles missing as in a number of examples at Nevasa, Chandoli, etc. The orientation of the body was north-west to south-east. Since the earth was loose, no pit could be detected. The body was, however, laid on its back, the head being placed in a big bowl of black-and-red ware which was slightly inclined towards the left. Another earthen bowl, kept upside down, covered the head. A few stone chips were found fixed close to the body from pelvic region to the shoulders. The hands, one over the other, were found placed on the abdomen. The palms were facing up.

On the left side of the skeleton was found a stone slab and a muller used for grinding colours since traces of red ochre are still visible on the surface. A fragment of the Malwa Ware pot was also found on this level. Microliths, of course, were found in large numbers; some were of geometric types while others were of the crested ridge variety.

This is the first evidence of a regular burial from a Malwa Chalcolithic site and to that extent its significance is much more than is often voiced.

Sarai Nahar Rai ; The 1970-71 excavations of this Late Stone Age site by the Uttar Pradesh Govt., Department of Archaeology, brought to light an 'Extended Burial' laid supine in west-east direction, with the head towards the west. Associated with the burial were two fragmentary microlithic cores, two lumps of burnt clay and charred animal bones. Surface indications of eight such burials were also noticed. Earlier explorations at the site (1968-69) had revealed the occurrence of Late Stone Age tools like blades, triangles, lunates, points, scrapers, arrowheads, etc.

Theur : The chalcolithic habitation site of Theur, situated some 24 km. north of Poona on the river Mula-Mutha, was excavated by Sri S. R. Rao. In the court-yard of a rectangular mud house of the earliest phase (c.1500 B.C.) a double-pot burial was unearthed. Unlike the burnished grey burial-urns at Nevasa, Chandoli, etc., the urns at Theur were of red ware with bulbous body and round bottom. The black-and-red ware found in abundance throughout the occupation, curiously enough, was not used for funerary purposes.

Mahurjhari : Excavations were undertaken in 1970-71 by Prof. S. B. Deo at Mahurjhari, about 15 km. south of Nagpur in Maharashtra. The site is known to contain stone-circles, of which seven were taken up for excavation in three different localities. These stone-circles ranged between 7·96 and 17 m. in diameter and some of these (Meg. I and II) were double-circles ; the filling of all three comprised pebbles, reddish murum and black soil. Variety of cup-marks were present in the peripheral stones of five stone-circles.

None of the stone-circles had, however, any grave-pit and from the filling inside were found pots of micaceous red ware containing only burnt earth and fragmentary human teeth, iron objects like chisels, daggers, axes, lamps and ladles and copper bangles, thin decorated pieces of sheets, bells (with iron tongue), nail-parers and etched carnelian heads. The pottery comprised the micaceous red, black-and-red and coarse red ware, the micaceous red ware being the most dominant one and the main shapes were globular pots with flared mouth and shallow dishes or covers. While in the black-and-red ware, which was very much restricted in number, the shapes met with were bowls, dishes and stems of stands, in the coarse red ware the shapes were mainly utilitarian like basins, dishes, spouted and globular pots.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

BIBLIOGRAPHY

BOOKS AND MONOGRAPHS

Allchin, F.R., *Piklihal Excavations*, (Hyderabad, 1960).

Allchin, F.R., *Neolithic Cattle Keepers of South India*, (Cambridge. 1963). *Utnur Excavations*, (Hyderabad, 1961)

Allchin. B. and R., *The Birth of Indian Civilization*, (Pelican Books, 1968)

Arati, E., *Palestine Before the Hebrews*, (Rome, 1963)

Banerjee, N.R., *Iron Age in India*, (New Delhi, 1965)

Bendann, E., *Death Customs*, (London, 1930)

Bowen, R.L., *Archaeological Discoveries in Southern Arabia*, (Baltimore, 1958)

Burgess, J., *Archaeological Survey of Western India*, Vol. I, NS (1874)

Casal, J.M. and G. *Site urbain et site funeraires des Environs de Pondichery*, (Paris, 1959)

Chatterji, B C., and Gupta, P., *Skeletal Remains from Adittanalur, Memoir., Anthp. S.I.* No. 3 (1963)

Childe, V.G., *New Light on the Most Ancient East*, (London, 1934)

Clark, Grahame, *World Prehistory*, (Camb. 1961)

Colani. Madaline, *Megaliths Du Haut-Laos*, (Paris, 1935)

Cousens, H., *The Antiquities of Sind, Imp. Sr. ASI*, vol. XLVI (1929)

Dasgupta, P.C., *The Excavations at Pandu Rajar Dhibi*, (Calcutta, 1964)

De Morgen, *Prehistoric Man*, (London, 1924)

De Terra, H. and Paterson, T.T., *Studies on the Ice Ages in India and Associated Human Cultures*, (Washington, 1939)

Deo, S.B., *Chalcolithic Chandoli*, (Poona, 1965)

Durkheim, E., *The Elementary Forms of Religious Life*, (London, 1915)

Elwin, V , *The Religion of an Indian Tribe*, (Bombay. 1955)

Elwin V., *Myths of the North-East Frontier of India*, (New Delhi, 1958)

Encyclopedia of Religion and Ethics, vol. IV (Edinb., 1911)

Fairservis, W.A., *Excavations in the Quetta Valley, West Pakistan*, vol. 45, pt. 2 (NY. 1956)

Field, Henery, *An Anthropological Reconnaissance in West Pakistan* : 1955, (Mass. 1959)

Finegan, J., *Archaeology of World Religions*, (Princeton, 1925)

Fox, Cyril, *Life and Death in the Bronze Age*, (London, 1959)

Frazer, J.G., *The Fear of Dead in Primitive Religion*, (London, 1933)

Frazer, J.G., *Golden Bough*, (Abridged Edition; London, 1954)

Ghirshman, R., *Fouilles de Sialk II*, (Paris, 1939)

Goody, J., *Death, Property and the Ancestors*, (London, 1962)

Gordon, D.H., *Prehistoric Background of Indian Culture*, (Bombay, 1958)

Griffith, R.T.H., *Hymns of the Atharvaveda*, (London, 1917)

Gupta, P. et el, Human Skeletal Remains from Harappa, *Memoir, Anthp. S.I.* No. 9 (Calcutta, 1962)

Gurdon, P.R.T. *The Khasis*, (London, 1914)

Hall, H.R., The *Civilization of Greece in the Bronze Age*, (London, 1928)

Hargreaves, H., *Excavations in Baluchistan 1925, Sampur Mound, Mastung and Nal. Memoir, ASI*, No. 35 (New Delhi, 1929).

James, E.O., *Prehistoric Religion*. (London, 1957)

James, E.O., *The Beginnings of Religion*, (London, 1954)

Jouveau-Dubreuil, G., *Vedic Antiquities*. (Pondichery, 1922)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Kane, P.V., *History of Dharmaśāstra. Vol. IV*, (Poona, 1953)
Kenyon, K.M., *Archaeology in the Holy Land*, (London, 1960)
Khan, A.W., *Yelleswram Excavations*, (Hyderabad, 1963)
Macdonnel, A.A., and Keith, A.B., *Vedic Index of Names and Subjects*, vol. I (London. (1912)
Mackay, E.J.H., *Chanhudaro Excavations: 1935-36*, (New Haven, 1938)
Mackay, E.J.H., *Fu ther Excavations at Mohenjodaro*, (Delhi, 1938)
Maringer, J., *The Gods of Prehistoric Man*, (London, 1960)
Marshall, J., *Mohenjodaro and the Indus Civilization*, (London, 1931)
Marshall, J., *Taxila*, 3 volumes, (London, 1953)
Nagarajarao, M.S., *Stone Age Hill Dwellers of Tekkalkota*, (Poona, 1965)
Perkins, A.L., *The Comparative Archaeology of Early Mesopotamia*, (Chicago, 1963)
Petric, F., *Pyramids and Temples of Gizh*, (London, 1885)
Philby, J.B., *Sheba's Daughters*, (London, 1939)
Piggott, Stuart, *Prehistoric India*, (Pelican Books, 1950)
Piggott, S., *Approach to Archaeology*, (London, 1959)
Radin, Paul, *Primitive Religion*, (New York, 1957)
Raikes, R., *Archaeological Explorations in Southern Jhalawan and Las Bela*, (Rome, 1968)
Rao, S. R., Excavation at Amreli, *Bull. MPGB.*, vol. XVIII (1966)
Ray, S. C., *Oraon Religion and Customs*, (Ranchi, 1928)
Reddi, V. R., *Pre-and Protohistory of South-Western Andhra Pradesh*, (Poona, 1968) Unpublished Ph. D. Thesis (Deccan College)
Reisenfeld, Alphenso, *The Megalithic Culture of Melanasia*, (Leiden, 1952)
Sankalia, H. D., et el, *From History to Prehistory at Nevasa* : 1954-56, (Poona, 1960)
Sankalia, H. D., *Prehistory and Protohistory in India and Pakistan*. (Bombay, 1963)
Sankalia, H. D., *Excavations at Langhanaj* . 1944-63, (Poona, 1965)
Sarkar, S. S., *Ancient Races of Baluchistan, Punjab and Sind*, (Calcutta, 1946)
Shah, P. G., *The Dublas of Gujarat*, (Delhi, 1958)
Shastri, K. N., *New Light on the Indus Civilization*, vol. II, (Delhi, 1965)
Sheshadri, M., *The Stone Using Cultures of Prehistoric Mysore*, (London, 1656)
Smith, E., *The Religion of Lower Races*, (London, 1905)
Sophia, Ehrhardt, and Kennedy, K. A. R., *Excavations at Langhanaj* : 1944-63, pt. III, (Poona, 1965)
Spencer, Herbert. *The Principles of Sociology*, (London, 1888)
Stein, Aurel, *Ancient Khotan*, (London, 1927)
Stein, Aurel, *An Archaeological Tour of Gedrosia, Memoir ASI*, No. 43 (New Delhi, 1931)
Stein, Aurel, *Archaeological Reconnaissances in North-Western India and South-Eastern Iran*, (London, 1937)
Stein, Aurel, *An Archaeological Tour in Waziristan and Northern Baluchistan, Memoir, ASI*, No. 37 (New Delhi, 1939)
Steklis, M., *Les Monuments Megalithiques de Palestine, Memoir, IPH*, No. 15, (Paris, 1935)
Studies in Prehistory, Ed. D.K. Sen and A. K. Ghosh. (Calcutta, 1966)
Subbarao, B., *Personality of India*, (Baroda, 1956)
Taylor, E. B., *Primitive Culture*, vol. I, (London, 1874)
Text Book of European Archaeology, (Cambridge, 1921)
The Census of India : 1931, (Simla, 1935), pt. II
The Dawn of Civilization, Ed. S. Piggott, (London, 1961)
Vats, M. S., *Excavations at Harappa*, (Delhi, 1940)
Wheeler, R. E. M., *Five Thousand Years of Pakistan*, (London, 1950)
Wheeler, R. E. M., *Early India and Pakistan*, (Bombay, 1960)
Whitney, W , *Atharvaveda*, Translation and Notes, (Harvard Oriental Series), vol. 8, (Camb., 1905)
Wolley, Leonard, *Ur Excavations*, (London, 1954)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

ARTICLES

Aiyappan, A., "Rock-cut Cave-tomb of Feroke, South Malabar", *JMS*, vol. XXIII (1933), pp. 299-314.

Aiyappan, A., "Rude Stone Monuments of Perumal Hills, Kodaikanal", *JMS*, vol. XXXI (1940-41), pp. 373-379.

Allchin, F. R., "The Stone Alignments of Southern Hyderabad" *Man*, vol. LVI, No. 150 (1956), pp. 133-136.

Antonini, C. S., "Preliminary Notes on the Excavation of the Necropolises found in Western Pakistan", *EW*, vol. XIV, Nos. 1-2 (1963), pp. 13-25.

Babington, J., "Descriptions of the Pandoo Coolies in Malabar", *TLSB*, vol. III (1823), pp. 324-30.

Banerjee, N. R., et el, "Sanur 1950 and 1952: a Megalithic Site in District Chingleput", *Anct. Ind.* No. 15 (1959), pp. 4-42.

Banerjee, N. R., "The Excavations at Sengamedu," *The March of Time*, June (1956)

Banerjee, N. R., "The Megalithic Problem of Chingleput in the Light of Recent Exploration," *Anct. Ind.*, No. 12 (1956), pp. 21-34.

Banerjee, N. R., "Megalithic Problem of India," *Studies in Prehistory*, (Calcutta, 1966), pp. 163-178.

Beck, H. C., "Notes on Sundry Asiatic Beads-beads from megalithic tombs and middens in Sulur Taluk and neighbouring districts," *Man*, vol. XXX, No. 10 (1930), pp. 170 ff.

Branfill, B. R., "Old Slab-Stone Monuments in Madras and Mysore," *Ind. Ant.*, vol. x (1881), pp. 97-100.

Cammiade, L. A., "Observations Upon Ancient sites in the neighbourhood of Kalugmalai", *Man*, vol. xxx, No. 136 (1930), pp. 187 ff.

Cardi, B. De, "A New Prehistoric Ware from Baluchistan", *Iraq*, vol. XIII (1951), pp. 63 ff.

Carlleyle, A. C. L., "Report on a Tour in East Rajaputana in 1871-72 and 1872-72", *Annl. Rept., ASI*, vol. VI (Calcutta, 1878), pp. 13-15, 33-39, 88-89, 104-108.

Carter, H. J., "Geography of the South-West Coast of Arabia", *JBBRAS*, vol. III (1851).

Chatterji, B. C., and Gupta, P., "Skeletal Remains from Adittanalur", *Memoir, Anthp. S. I.* No. 3 (1963).

Childe, Gordon, "Directional Changes in Funerary Practices during 50,000 years", *Man* (1945), No. 4, pp. 13 ff.

Childe, V. G., "Megaliths", *Anct. Ind.*, No. 4 (1947-48), pp. 4-13.

Choudhury, K. A., and Ghosh, S. S., "Plant Remains from Harappa 1946", *Anct. Ind.*, No. 7 (1951), pp. 3-19.

Cockburn, J., "On Flint Implements from Kon ravines of South Mirzapore", *JASB*, vol. LXIII, pt. 3 (1894), p. 21,

C. von Furer-Haimendorf, "The Problem of Megalithic Cultures in Middle India", *Man in India*, vol. XXV (1945), pp. 73-86.

C. von Furer-Haimendorf, "New Aspects of the Dravidian Problem", *Tamil Culture*, vol. II, No. 2 (1953). pp. 127-35.

Dales, F. G., "A Search for Ancient Sea ports", *Expedition*, vol. 4. No. 2 (1962), pp. 2-10.

Dani, A. H., "Timargarha and Gandhara Grave Culture", *Anct. Pak.*, vol. III (1967)

Deo, S. B., "Megaliths in Maharashtra", *SPPMI*, (1969), pp. 27-36.

De Terra, H., "Excavations at Burjahama", *MAPS*, (1936)

Dhavalikar, M. K., "A Megalithic Plough Coulter from Brahmagiri", *SPPMI* (1969), pp. 66-68.

Dhavalikar, M. K., "Chalcolithic Burials : The Tekwada Evidence" *Puratattva*, No. 2 (1968-69)

Dikshit, K. N., "The Origin and Distribution of Megaliths in India", *SPPMI* (1969), pp. 1-11.

Dupree, Louis, 'Note on Grants' *Year Book of the American Philosophical Society* (1967), pp, 504-8.

Elwin, V., "Funeral Customs in Bastar State", *Man in India*, vol. XXV (1945), pp. 86-133.

Franco, B., "Notes on the Megaliths", *EW*, vol. 12 (1961) pp. 256-263.

Ghosh, A., "The Rajaputana Desert-Its Archaeological Aspect", *Bull. N.I.S.I.*, No. 1 (1948), pp. 37-42.

Goody, J., "Death and Social Control among the Lo Dagga", *Man* (1959), No. 204, pp. 134-38.

Goswami, M. C., and Sharma, T. C., "Report on the Investigation into Prehistoric Archaeology of North Cachar Hills, Assam", *JUG*, XIII, 2 (Science), (1962) pp, 63-66

Gupta, P., and Dutta, P. C., "Human Remains from the megaliths at Yelleswaram" *Man in India*, vol. 42, No. 1 (1962), pp. 19-34

Gupta, S. P., "Burial Customs in Ancient India", *JBRS*, vol, XLVI (1960), pp. 84-102.

Gupta, S. P., "Arrowheads: Its Technology and History", *JBRS*, XLVII (1961), pp. 129-141.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Gupta, S. P., "Is there a Neolithic Burial Custom in the Deccan", *JARS*, vol. XXIX (1964).

Gupta S. P., "Terracotta Vessels and Figurines from Khotan (Central Asia) in the Hermitage Museum, Leningrad", *JOIB*, vol. XVII, No. 2 (1967), pp. 168-180.

Gupta, S. P., "C-14 Dates Determining the Dynamics of Indian Chalcolithic Cultures", Paper read in the Seminar on 'North Indian Chalcolithic Culture' University of Patna, 1969 (Unpublished)

Heine Geldern, R., "Foreword", *Iron Age in India*, by N. R. Banerjee (New Delhi, 1965).

Holloway, R. L., "Culture : A Human Domain", *Current Anthropology* (Oct. 1969), vol. 10, No. 4, pp. 395-407.

Hughes-Buller, R., "Cave Burial in Baluchistan", *Ind. Ant.*, vol. XXXII (1903), pp. 242-3.

Hunt, E. H., "Hyderabad Cairns and their Significance", *JRAI*, NS. vol. LIV (1923), pp. 140-56.

Hunt, E. H., "Megalithic Burials in South India", *JRAS* (1933) pp. 508-11.

Hunter, G. R., "Final Report on the Excavations in the Mahadeo Hills", *NUJ*, No. II (1936). pp. 30 ff.

Kearns, J. T., "The Cairns of Tinnevelly", *MJLS*, vol. XXI (1859), pp. 27-30.

Kramer, S. N., "The Indus Civilization and Dilmun, the Sumerian Paradise Land", *Expedition*, vol. 6, No. 1 (1963), pp. 44-52.

Krishna Iyer, L. A., "The Prehistoric Archaeology of Kerala", *The Modern Review*, (March, 1946), pp. 182 ff.

Krishnaswami, V. D., "Megalithic Types of South India", *Anct. Ind.* No. 5. (1949), pp. 35-45.

Krishnaswami, V. D., "The Neolithic Pattern of India", *Anct. Ind.* No. 16 (1960), pp. 25-64.

Kroeber, A. L., "Disposal of the Dead", *Am. Anthp.*, NS. 29 (1927), pp. 308-315.

Lal, B. B., and Thapar, B. K., "Excavations at Kalibangan". *Cultural Forum*. No. 34, (July, 1967) pp. 78-93.

Lamberg-Karlovasky, C. C., et. el, "The Cairn Burials of South-eastern Iran", *EW*, NS. vol. 18, No. 3-4 (1968) No. 269-76.

Leshnik, L. S., "Archaeological Interpretation of Burials in the light of Central India Ethnography", *Zeitschrift fur Ethnologie*, Band 92, Heft 1 (1927).

Major Mockler, "On Ruins in Makran", *JRAS*, (1877), pp. 121 ff.

Meulen, D. van der, "Aden to Hadhramaut and Journey to the Coast", *Geographical Journal*, No. 93, (1939), p. 7.

Misra, V. N., "From Stone to Metal", *The Times of India*, Dt. 21-9-1969.

Movius, H. L. Jr., "The Mousterian Cave of Tashik-Tash, Southern Uzbekistan, Central Asia". *Bull. of the American School of Prehistoric Research*, No. 17 (1953), pp, 11 ff.

Oakley, K. et el., "Contributions on Trepanning or Trephination in Ancient and Modern Times," *Man* (1959), No. 133, pp. 93-96.

Panchamukhi, R. S., "Dolmens and Cairns of Karnataka", *JBU*, vol. XIV, pt. 4 (1945-46), pp. 10-28.

Pande, B.M., Ādim Kashmīr ke Gartavāsi", *Sanskriti*, III (1Del. 969), pp. 451-460. A.N. Jha Felct. Vol.

Rainy, Froelich. "The Museum Expands". *Expedition*, vol. 5, No. 1 (1962), pp. 2-9.

Ramachandran, K. S., "A Bibliography on Indian Megaliths", *JMS*, vol. 52 (1961) and vol. 53 (1962-63), pp. 1-90.

Ramachandran, K. S., "Megalithic Rock-cut Caves and their parallels Outside India", *SPPMI* (1969), pp 59-65.

Rao, C. H., "Mysore Castes and Tribes"—A General Survey" *JMS*, vol. 13, No. 1 (1922-23). pp. 472-486.

Rao, S. R., "Further Excavations at Lothal"; *Lalit Kalā*, No. 11 (1962), pp. 14-30.

Rensch, B. and Altevgot, R., "Das Ausmass visueller Lernfahigkeit eines Indischen Elefanten", *Zeitschrift fur Tierpsychologie* (1955), 12 (1).

Rivet Carnac, J. H., "Prehistoric Remains in Central India"; *JASB*, vol. XLVIII, pt. I (1879), pp. 1-16,

Roper, M. K., "A Survey of the Evidence for Intrahuman killing in the Pleistocene", *Current Anthropology*, vol. 10 (Oct. 1969), No. 4. Comments by V. Bhalla, pp. 450-51.

Ruben, Walter. "Eisenschmiede und Damonen in India", *IAFE*, Band XXXVII, Supplement, (Leiden, 1939), pp. 154-165.

Sankalia, H. D., "Stone Age Hill Dwellers of South India (Excavations at Tekkalkota, Bellary District, Mysore State)", *Indica*, vol. 1. No. 2, pp. 129-140.

Sarkar, H. V., "Disposal of the Dead at the Indus Valley and its survivals among the Aboriginal Peoples of India", *Man in India*, vol. XXXI (1951) No. 1., pp. 23-32.

Sarkar, H, V., "Megalithic Monuments of the Lower Krishna Basin", *SPPMI* (1969), pp. 12-26.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Sarkar, S.S., "Human Skeletal Remains from Brahmagiri", *Bull. Dept. Anthp.*, vol. IX, (1960), No. 1

Sen, D. K., "Observations on the Megalithic Skeletal Remains", *SPPMI* (1969), pp. 94-98.

Sharma, A. K., "Neolithic Human Burials from Burzahom, Kashmir", *JOIB*, vol. XVI, No. 3 (1967), pp. 239-242.

Sharma, A. K., "Animal Burials from Burzahom—A Neolithic Settlement in Kashmir", *JOIB*, vol. XVIII, Nos. 1 and 2 (1968), pp. 40-44.

Sharma, Y. D., "Rock-cut Caves of Cochin", *Anct. Ind.* No. 12 (1956), pp. 93-115.

Sharma, Y. D., "Past Pattern in Living as unfolded by the Excavations at Rupar", *Lalit Kalā* No. 2 (1956), pp. 121-29.

Shaw, W., "Notes on the Thandou Kukis" *JASB*, NS (XXIV) (1928), pp. 11-175.

Sheshadri, M., "A Neolithic Burial From T. Narsipur", *Purātattva*, No. 2 (1968-69), pp. 55 and 56.

Singh, P., "Megalithic Remains in the Aravallis", *Purātattva*, No. 2 (1968-69), pp. 46-48.

Singh, P., "Megaliths of North-Western India", *SPPMI*, (1969), pp. 46-58.

Sounder Rajan, K. V., "Megalithic and Black-and-Red Ware", *SPPMI* (1969), pp. 69-89.

Srinivasan, K. R., "Megalithic Burials and Urn-fields of south India in the light of Tamil literature and tradition", *Anct. Ind.* No. 2 (1946), pp. 9-16.

Stacul, G., "Preliminary Notes on the Excavation of the Necropolises found in Western Pakistan", *EW*, vol. XVI (1966), Nos. 1-2, pp. 37-79.

Stacul, G., "Notes on the Discovery of a Necropolis near Kherai in the Garband Valley (Swat, West Pak.), *EW*. vol. XVI (1966), Nos. 3-4, pp, 261-274.

Stacul, G., "Discovery of four pre-Buddhist cemeteries near Pacha in Buner (Swat, West Pak.)", *EW*, vol. XVII (1967), pp. 220-232.

Subbarao, B., "Megalithic Problem of South India and the Dravidian Languages", *TASSI*, Silver Jubilee Volume, (1962) pp. 132-151.

Sundara, A., "Protohistoric Sites in Bijapur District", *JKU*, vol. IV (1968), pp. 3-23.

Thapar, B. K., "Porkalam 1948 : Excavation of a Megalithic Urn-burials". *Anct. Ind.*, No. 8 (1952), pp. 3-16.

Thapar, B. K., "Maski 1954 : a Chalcolithic site of the Southern Deccan", *Anct. Ind.* No. 13 (1957), pp. 4-142.

Thapar, B. K., "Neolithic Problem in India", *IP* : 1964, pp. 87-93.

Tobias, P. V., "The Olduvai Bed I Homonid with special reference to its cranial capacity", *Nature* No. 202 (1946), pp. 24 ff.

Tobias, P. V., "Cranial capacity of Zinzanthropus and other Australopithecine", *Nature* No. 197 (1962), pp. 43-46.

Tucci, G., "The Tombs of the Asvakayana". *EW*, vol. XIV Nos. 1-2 (1966), pp. 27 ff.

Walhouse, M. J., "Some Non-Sepulchral Rude Stone Monuments in India, Persia and Eastern Asia". *Ind. Ant.*, vol. VIII (1879), pp. 164-167.

Wheeler, R. E. M., "Harappa 1946 : the Defences and Cemetery R 37" *Anct. Ind.* No. 3 (1947), pp. 58-130.

Wheeler, R. E. M., "Brahmagiri and Chandravalli 1947 : Megalithic and other cultures in Mysore State", *Anct. Ind.* No. 4 (1947), pp. 181-308.

Zuckerman, S., "The Adichanallur skulls", *Bull. MGM*, NS. vol. II, pt. I, (1930), pp. 1-24.

CC-0. Agamnigam Digital Presevation-Foundation, Chandigarh

INDEX

A

Adiat-al-Sultan, 326.
Adichanallur, 217, 219, 224, 230, 233, 239, 296, 300, 301, 305.
Africa (Tribes) 17, 46, 84.
Aiyappan, 194, 199.
Alisar Huyuk, 139.
Allchin, R., 91, 96, 115, 122, 193, 223, 225, 226, 227, 228, 230, 239, 294, 295, 327, 330.
Alpine, 274, 284, 285, 287, 289, 304.
Al' Ubaid, 280, 281.
Amreli, 171, 179, 181.
Amrithamangalam, 195, 224.
Anau, 279.
Animal bones in graves, 22, 55, 68, 87, 88, 107, 205, 214, 215, 267.
Animal burial, 58, 59, 83, 87, 88-95.
Antonini, C. S., 147.
Āpastamba Srautasūtra, 161.
Arabia, 226, 319, 323-326, 330, 331, 333-335.
Arikamedu, 191.
Armenoid, 270, 274, 285, 287.
Arpachiyyah Tepe, 321.
Aryan, 15, 74, 75 78, 159, 160, 163, 164-168, 264, 270, 289, 299, 333.
Asota, 270, 328.
Assur, 252.
Āśvalāyana Gṛhyasūtra, 164, 166.
Atharvaveda, 160-163, 264.
Atranjikheda, 194, 238.
Australoid, 233, 239, 256, 270, 271, 278-280, 285, 286, 292, 293, 296, 298-305.
Ayer, A. A., 294.

B

Baghadad, 328, 335.
Baghai-khor, 17, 18, 19, 21, 29, 248, 250.
Bagor, 22-31, 248, 258.
Bahal-Tekwada, 113, 114.
Balambat Culture, 147, 152-154, 168.
Ballabha Saran, 212.
Bampur, 168, 264.
Banerjee, N. R., 143, 167, 182, 183, 192, 193, 202, 208, 209, 213, 214, 225. 227, 228, 231, 266, 323.
Bangla-Motta-Paramba, 198.
Banimilia-Bahera, 170, 173-176, 267.
Bantus of Africa, 1.
Barrow, 103.
Baudhāyana Pitrasūtra, 164.
Bayana, 279.
Bengal (low castes), 48.
Beth Shan, 328.
Bhalla, V., 244.
Bier, 172.
Binjor, 370.
Boghaz-Keui, 143.
Bones below ankles missing, 102, 106, 110, 111, 123.
Bones painted with red ochre, 85, 90, 91.
Bowen, 144.
Box-urn Burial, 156, 166.
Brahmagiri, 93, 97, 100, 106, 111, 114. 191, 192, 197, 200-204, 208, 232, 233, 296, 298, 301, 302.
Brāhmaṇas, 106.
Braidwood, 14.
Britons, 12.
Buner, 166, 174.
Burzahom, 68, 82, 89, 92, 122, 170, 223, 248, 250, 260, 261.
Bushire, 125.
Butkara II, 149, 150, 155, 156.
Butzer, 27.
Buxton, L. H. D., 279, 280.

C

Cairn, 14, 173, 176, 177.
Cairn-circle, 123, 173.
Cannibalism, 10, 246.
Cappieri, M., 276, 277, 280-282, 286, 289, 329.
Cardi, Miss, 32.
Carlleyle, A. C. L., 170, 173, 176.
Carter, 144.
Cast-away, 9, 11, 77.
Caton-Thampson, G., 326.
Cemetery, 21, 37, 39, 40, 42, 44, 48, 49, 53, 59, 60, 62, 63, 67, 70, 75-79. 93, 95, 100. 113, 114, 123, 131, 135, 146, 147, 149, 157, 166, 167, 169-174, 181, 190, 201, 211, 212, 214, 221, 224, 234, 235, 239, 240, 250-253, 256, 259, 263, 265, 330.
Cemetery "H", Ravi Culture 53, 70-75, 78, 250, 255, 256 277, 283, 286, 289, 317, 318.
Cemetery R. 37, 53, 54, 70, 71, 73, 74, 277, 283, 284, 287, 289, 292.
Central Asia, 15, 169, 265, 295, 323, 332, 335.
Chachai Falls, 176.
Chakma, 272.
Chandigarh, 52, 59.
Chandoli, 102, 107, 110, 111, 112, 114, 118, 289, 292, 296, 301, 321.
Chanhudaro, 61, 248, 282.
Chaperkai Hills, 128.
Chatterji *et al*, 233, 270, 284, 285, 237, 289, 300.
Childe, V. G., 7, 9, 74, 196, 232. 237, 244. 245, 249, 255, 323, 335.
Child Burial, 38, 41, 42, 72, 77, 93, 95, 96, 130, 150-154, 157, 166, 167. 169, 180, 201, 247.
Child-Infant Burial, 98, 99, 101, 104, 106, 107, 110, 112, 120, 124.
China, 83, 91, 257.
Chirand, 119, 122.
Chono Alacaluf, 247.
Christian practices,2.
Chunar, 174.
Chura, 289.
Cist, 159, 170, 173-175, 178-182, 195, 197, 200, 202, 207, 209, 212-216, 224, 226. 235, 236. 267, 329.
Cist with port-hole, 158, 178, 196, 197, 201, 229.
Coffin, 54, 55, 76, 96.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Coimbatore, 219, 236, 237.
Coin in Megalith, 191.
Collective Burial, 40, 41, 42, 47, 148, 152. 156, 166.
Communal Burial, 97.
Complete Inhumation in Megaliths, 213, 214.
Cremation, 8, 9, 11-13, 33-42, 46-48, 53, 58, 59, 64, 70, 71, 75, 79, 88, 106, 111, 118, 125, 128, 130, 131, 133, 140, 145, 146, 148, 152-159, 166-168, 177-183, 217, 234, 250, 264, 266, 267.
Cro-Magnon, 7.

D

Dabar kot, 36, 47, 261.
Daimabad, 102, 107, 109, 110, 114, 124, 256.
Dales, G. F., 60, 130. 131.
Damba-koh, 125, 135, 139, 140, 144, 145, 265.
Damba Bhuti, 250.
Daniel, Glyn, 228, 232, 236, 319, 324.
Dani, A. H.. 146-148, 154, 160, 166, 168, 169, 264.
Dara-i-kur, 89, 92.
Das Gupta, P. C., 116.
Dausa, 170, 177.
Death, ceremonies, 19.
Death, Concept of, 1, 2, 7, 31, 75, 76, 79, 101, 246.
Demarcated (or Defined) grave, 56, 67, 69.
De Morgan, 261.
Deo, S B., 110, 221.
Deodhoora, 170.
Deshpande, M. N., 109, 110, 113, 116.
Devikulam, E., 221.
Dhanora, 221, 223.
Dharmasindhu, 165.
Dhavalikar, M. K., 109, 114, 116, 190, 191.
Dinaric, 274.
Dog burial, 68, 126.
Double burial. 9, 10, 68, 69, 75, 88. 93, 95, 156, 158, 213, 262, 321.
Dublas of Gujarat, 6.
Durkheim, E., 243.
D. vender Meulen, 237.

E

Early Stone Age, 16.
Earth Burial, 28, 29, 37, 41, 72, 77, 78.
Economic Factors, 9, 15, 25, 32, 48, 77, 255.
Egypt, 3, 10, 28, 72, 56, 75, 76, 88, 246, 257, 262, 320, 327. 328.
Ehrhardt, S., 28. 104, 106, 107, 276, 277.
El toluen, 247.
Enclosure Burial, 40, 41, 47, 48.
Engraving, 215.
Equidae bones in graves, 213, 217.
Es-Sukul, 247.
Europe, 17, 89, 148, 255, 264.
Exposure, 10, 47, 59, 71, 77. 79, 85, 93, 95, 125, 133, 137, 139, 140, 148, 159, 166, 172, 214, 224, 234, 235, 250, 261, 265, 266.
Extended Burial, 9, 12, 18, 19, 23, 24. 25. 29, 47, 54, 60, 63, 66, 68, 69, 72, 73, 77, 78, 84, 85, 92, 96, 97, 99, 101, 102, 104, 106, 109, 111, 113, 116-118 120, 123, 148, 177, 250, 260, 261.

F

Fairservis, W. A., 178.
False Extended burial, 10, 23, 93, 95, 97, 103, 120, 123, 237.
False Flexed burial, 85.
Family burial, 63.
Fanuch, 139.
Feroke, 199.
Field, Henry, 131.
Fire Ritual, 175.
Flexed burial, 9, 12, 23, 25, 29, 30, 40, 42, 47, 60, 72, 77, 78, 84-88, 91, 92, 117, 118, 120, 148, 152-154, 158, 250, 260, 261.
Fractional Burial, 23, 27, 40-42, 46-48, 54, 57, 71, 77, 84-86, 90-98, 118, 120, 128, 132, 133, 148, 152, 154, 158, 168, 224, 225, 331.
Fractional Collective Burial, 87, 88, 91, 92.
France, 260.
Frazer. J. G.. 242, 243, 244.

G

Gatti, 133.
Gawra Tepe, 320, 321.
Ghaligai, 168.
Ghosh, A., 62, 70.
Giyan Goth, 138.
Glob, Prof., 328, 329, 333.
Goody, J., 3.
Gordon, D. H., 40, 53, 74, 225, 302, 323.
Grave-goods, 1, 8, 20, 23, 24, 25, 28-30, 38. 39, 40, 42, 46, 48, 56, 59, 60, 61, 63-65, 67-78, 84-86, 96-104, 107, 112, 114-117, 124, 125, 128-140, 143, 145, 150, 152, 153, 156, 158, 159, 169, 172-182, 184-188, 190, 202, 204, 205, 209, 211-217, 224, 225, 228, 240, 251, 252, 253, 259, 261, 265, 267.
Greece, 2, 25, 30, 246, 257, 320.
Group Burial, 38.
Guha, B. S., 271, 272, 278-281, 301, 303.
Gulf of Oman, 230.
Gupta *etal*, 233, 283-285, 287, 292, 293, 299, 300,

H

Habitation burial, 28, 29, 31, 33, 34, 36, 37, 40, 46, 48, 79, 93, 98.
Haimendorf, 302, 323, 325.
Hajar-bin-Humaid, 326.
Halingali, 206.
Hallur, 102, 183, 189, 192-194, 200, 205, 206, 208, 212, 229, 230, 232, 236-238.
Hallur culture, 248, 250, 259, 262, 301, 302.
Harappan, 30, 33, 36, 39, 45, 51. 56, 69, 91, 122, 123, 169, 248, 283-293.
Harding, 326.
Hargreaves, H., 40.
Hassuna 321.
Hawks, Jaquetta, 66.
Heine Geldern, R., 225, 323.
Hili, 333.
Hissar, 285, 289, 302, 305, 321.
Hollway, 244, 246.
Horse, 142, 157, 265, 332.
Horse bones, 135, 190, 216, 219, 240.
House burial, 21, 22, 25, 28, 253, 256, 263.
Hsu, Prof., 243, 245.
Hunur, 207, 208.
Hunter, G. R., 18.
Hureidha, 326.
Hybrid burial, 103.

I

Inamgaon, 101, 104, 107, 112, 113.
Indo-Europeans, 233, 239.
Indus Civilization, 5, 6, 28, 32, 51.
Iran/Iranian, 46, 80, 169, 254, 325, 332, 335.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

J

Jadganhalli, 195, 204.
Janampett, 190.
Jar burial, 48, 58, 59, 61, 62, 65, 71, 72, 74, 75, 78, 99, 100, 159, 256, 317, 330.
James, E.O., 90, 320, 321, 329.
Jeman Goth, 129, 137, 138.
Jewanri, 131.
Jewurgi, 301.
Junapani, 215, 216, 219, 239, 329.

K

Kadr Bad, 138.
Kakoria, 170, 176, 266.
Kalibangan, 51, 52, 55, 62, 75, 77, 122, 248, 263.
Kampti, 138, 161, 164, 190, 216, 217, 224.
Kappers, C.U.A., 287, 289, 299, 302, 305.
Karanchi, 140, 170, 178, 179, 181, 186.
Karnataka Tribes, 4.
Karve, I., 276, 277.
Katelai, 149, 155-158, 166.
Katukan, 168.
Kaundinyapur, 219.
Kausikasūtra, 163.
Kennedy, K. A. R. *et al*, 26, 28, 97, 122, 291-293, 297, 298.
Kesarpalle, 215.
Khan. A. W., 213, 240.
Khapa, 193, 217-221, 224.
Khare, M. D., 93.
Khasis of Assam, 3, 4.
Kharisas of Manbhum, 107.
Khazanchi, T.N., 223.
Khera, 176, 177.
Khotan, 140.
Khurab, 168.
Kili-gul-Mohammad 33.
Kirman, 139.
Kish, 300.
Kotia, 174-178, 267.
Kovali, 103.
Krishnaswami, V.D., 80, 82, 91, 190, 194-197, 213, 239, 297, 319.
Kroeber, 6.
Kuk-Koba, 247.
Kulli, 37, 131, 180, 261.
Kunnattur, 212.

L

Lal, B. B., 62, 66, 327.
Lamberg-Karlovsky, 321.
Langhanaj, 26-29, 248, 258, 277, 303, 304.
La Tene, 230, 319.
Late Stone Age, 17, 123.
Leh, 170, 178.
Lekhahia, 19, 29, 31, 248, 250, 258,
Leroi-Gaurhan (Mrs.) 247,
Leshnik. L.S. 189, 190, 191, 219, 225, 228, 229, 231, 232, 323.
Lo Dagga, 2.
Loebanr, 149, 155, 157, 158.
Lothal, 51, 52, 68, 69, 75, 248, 250, 262, 289, 293.

M

Macerating pit, 94, 95, 202.
Magico-Religious Factors, 98, 124, 242-251.
Magh, 272.
Mahābhārat, 168.
Majumdar, M. M., 237.
Malhotra, K. C., 292, 295, 296.
Malinowski, 5.
Mallowan, 321.
Marlas of M.P., 3.
Manimekhalai, 234, 235, 238.
Maringer, J., 249.
Martin, 274, 286.
Maghsha, 327.
Maski, 199, 205, 206, 214, 221, 223, 260, 295.
Massacred body, 60.
Mastabas of Egypt, 3.
Mausoleum, 11.
Maz-de Azil, 261.
Mazenda Damb, 130.
Mediterranean, 28, 158, 233, 239 254, 256, 260, 271, 277, 298, 301-305.
Megalithic, monuments, 14, 82, 94, 100, 103, 123, 170, 171, 179, 181-183.
Mehi, 37, 39, 47, 250.
Melanesians, 246.
Memorials, 11, 66, 72.
Menhirs, 11, 82, 170, 177, 184, 199, 221, 223, 235, 236.
Mesolithic, 92.
Mesopotamia, 3, 186, 226, 257, 262, 320 321, 324, 328.
Mexico, 11.
Mezru' ah, 329.
Middle Asia, 28, 89, 91.
Middle Stone Age, 16, 17.
Misra, V.N., 22.
Miss Cardi, 141-143.
Miss Meulen, 144.
Mixed Burial, 42, 148, 152, 153, 156, 168.
Mockler, Maj. 16, 131-133, 135, 136, 145.
Moghul Ghundai, 35, 47, 79, 126-139, 142.
Mohenjodaro, 60, 69, 248, 278 285, 293, 296, 300.
Mongoloid, 271, 272, 278.
Mousterian, 257.
Multiple Burial, 9, 10, 55, 148, 156 158.
Mummification, 246.

N

Nadi-i-Ali, 142.
Nagas, 272.
Nagarjunakonda, 89, 92-95, 97, 100-103, 111, 114, 214, 215, 250-252, 299.
Nagrajarao, M. S., 96, 97, 99, 208.
Nal, 40-43, 47, 48, 129, 130, 251, 261, 278.
Narain, A. K., 170, 173.
Nasirabad, 137.
Natural Factors, 25, 77.
Neanderthal man 7.
NEFA, 3, 7.
Negrito, 271.
Neolithic, 30.
Nevasa, 28, 102, 103. 109-111, 113, 114, 118, 289, 291-293, 296, 301, 321.
Noh, 194, 238.
Nordic, 274, 289.

O

Oraons of Palamu, 4, 257.
Orientation, 25, 30, 86, 138, 149, 152, 156, 159, 169, 179, Chalcolithic period, 23, 95-98, 102, 109, 113, 116, 117, Late Stone Age, 19-21, 23, 27, Harappa culture, 54, 60, 63, 68, 75, 77, Megalithic, 159, 183, 209, 213, 214, 330, Neolithic, 85-87, 91, 93, Iron Age, 24.
Ownership right, 25, 68.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

P

Painted Panel on burial Jars, 72, 75.
Paiyampalli, 209, 231, 301.
Palavoy, 95, 114.
Palaeolithic, 90, 92.
Palestine, 12, 236, 255, 264, 324, 327, 333, 335.
Pallavaram, 196.
Panchamarhi, 18, 29.
Pandran, 126.
Pandu-Rajar-Dhibi, 116, 118.
Pant, P.C., 167.
Pappu, R. S., 103.
Passage Grave, 103, 195, 206, 207, 219.
Periano Ghundai, 33-35, 46, 47, 79, 261.
Perkins, 320, 321.
Persian Gulf, 226,
Perumal Hills, 227.
Phiby, 144.
Physical Types, 13, 27, 28, 73, 74, 77, 78.
Piggot, S., 186.
Piklihal, 96, 221, 223, 294-296, 301, 304.
Poles, 90.
Porkalam, 194.
Pudukottai, 197.
Pu'anr, 159.
Pyramids, 3, 257.

Q

Qatara, 333.
Queen Charlotte Islands, 88,
Quetta, 129.

R

Racial Factors, 44, 47.
Raigir, 297, 305.
Ramachandran, K. S., 193.
Randal Dadwa, 52, 69.
Rangpur, 248.
Ranjala, 115, 193.
Ras-Abaruk, 329.
Ras-al-Matbakh, 330.
Ras-Result, 325.
Rao, G., 295.
Rao ,S. R., 68, 69, 179, 181, 182, 207, 209, 211, 262,
Ravi Culture, 53.
Reburial, 10, 20, 167, 257.
Reclining Burial, 86.
Rectangular pit burial, 62, 65, 67, 75.
Redfield, R., 5.
Red ochre treatment, 10.
Reddi, V. R., 95.
Religious facfors, 8, 12, 15, 30, 31, 77, 86, 145, 185, 186, 255.
Rensch *et al*, 244.
Re-use of Burial. 63, 153.
Rigveda, 160, 165, 166, 264.
Ritual of spreading stone chips, 18, 19.
Romans, 2, 12.
Round pit burial, 63, 65, 67, 75, 76.
Ruben, W., 225.
Rupar, 52, 67, 69, 76.

S

Saidu Sharif, 155.
Sali, S. A., 115.
Samādhis, 11.
Sangam literature, 234, 235, 238.
Sankalia, H. D., 26, 92, 96, 98, 99, 104, 262, 276, 320.
Sankavaram, 196.
Sanur, 202, 208.
Saoras of Orissa, 1.
Sarai-Nahar-Rai, 29-31.
Sari Asiab, 139.
Sarkar, H. V., 5, 48, 215.
Sarkar, S. S., 71, 232, 233 239, 260, 286, 287, 289, 299-302, 305.
Satī, 10, 262.
Satī Stone, 11.
Satmas, 177.
Śatapatha Brāhmaṇa, 163-165. 167, 264.
Satyāṣāḍha Srautasūtra, 164.
Savanduig, 197.
Scytho-Iranians, 305.
Secondary burial, 8, 10, 78, 79.
Sen, D. K,, 233.
Sengamedu, 192.
Sepulchral monuments 8, 11.
Seshadri, M., 102, 204.
Sewel *et al*, 300.
Shahdinzai, 130.
Shah Tepe, 122.
Shahi Tump, 29, 42, 47, 122, 261.
Shanidar, 247.
Sharma. A. K., 90.
Sharma, G. R., 170, 175, 176, 228, 266.
Sharma, Y. D., 67, 119.
Shastri, S. , 53-55, 74.
Sialk, 137, 141, 142, 186, 227, 232, 233, 299, 300, 302, 303, 321, 323, 335.
Sialkot, 279.
Śilpadikāram, 234.
Singh, P., 177.
Skull burial, 10, 22, 27, 61, 62, 126, 178.
Smith, Robertson, 243.
Smṛityarthasāra, 165.
Snake bones, 153.
Social Factors, 2-5. 9, 15, 24, 25, 28, 31, 44, 47, 63, 66, 76, 84-86, 102, 124, 242, 250, 253-256, 263.
Socio-economic Factors, 30, 257.
Socio-Religious Factors, 240, 257, 2-5.
Sogalai, 159.
Sonpur, 118, 119.
Sounder Rajan, K. V., 183, 227, 228, 231, 266.
Spencer, Herbert, 241, 243.
Srinivasan, K. R., 199, 233-236, 238.
Srinivasan, K. R. *et al*, 302.
Stacul, G., 147, 148, 166, 168, 264.
Stein, Aurel, 33-38 45, 46, 48, 126, 128-137, 139, 144.
Stepped grave-pit, 63, 75.
Stupas, 3, 11.
Subbarao, B., 193.
Sumerian, 52.
Sundara, A., 103, 206.
Sur Jangal, 128.
Sutka-gen-dor, 45, 47, 261.
Swat Valley Graves, 165-169, 182, 183, 194, 230, 238, 250, 255, 263-265.
Symbolic Burial, 66, 122.

T

Takalghat, 93, 217, 221, 219, 230, 302.
Take Dap, 132.
Tarike, 168. 159.
Tarkhanwala Dera, 51, 53, 70, 75.
Tashik-Tash, 247, 257.
Taxila, 137, 140, 143.
Taylor, E. B., 243, 244.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Tekkalkota, 96-102, 106, 107, 256, 295, 296, 301, 304.
Terdal, 103, 206, 207.
Thadau Kukis of Assam, 5.
Thana, 154, 155, 166.
Tholoi, 254.
Thapar, B. K., 62, 205, 213, 215, 216, 270.
Thesiger, 329.
Timargarha, 150-157, 229, 231, 251, 263, 265.
Titiev, 243.
T. Narsipur, 102, 124.
Tobias, 24.
Tor Dehri, 128.
Trepanning, 68, 84, 91, 261.
Tribal Practices, 10, 124, 217.
Trofinova, 295.
Tumas, 327.
Tump-i-Gabraha, 139.

U

Uparas of Mysore, 5.
Upper Palaeolithic, 17.
Ur, 1 280, 281.
Urn Burial, 33, 36, 37, 39, 42, 46-48, 58, 59, 69, 75, 77-79, 94, 95, 98-100, 102-104, 106, 110, 113, 114, 117, 118, 122-124, 168, 179, 180, 184, 207, 216, 221, 223, 231, 235, 237, 250, 320.

V

Vaddas of Mysore, 5.
Vallois, 299.
Varma, R. K., 18.
Veddid, 28.
Vedic, 75, 234.
Verma, B. S., 118, 119.
Visage Urn, 152, 156, 166, 168, 263, 264.

W

Waghodur, 178.
Wahir, 130.
Wanchos of NEFA, 3.
West Asia, 15, 17, 56, 76, 143, 263, 264, 265, 319-321, 324, 326, 329, 332.
Wheeler, R. E. M., 39, 53-55, 59, 60, 70, 71, 74, 75, 93, 100, 101, 178, 179, 185, 191-195, 200, 202, 204, 225, 231, 237, 238, 287, 298, 323.
Windir. 138.

Y

Yaghan, 247.
Yahya-Tepe, 143. 321.
Yelleswaram, 190, 213, 226, 233, 299, 301, 302.
Yemen, 322, 327.
Yotkan, 136.

Z

Zangian, 133, 134.
Zayak, 130.
Zeuner, F. E., 323.

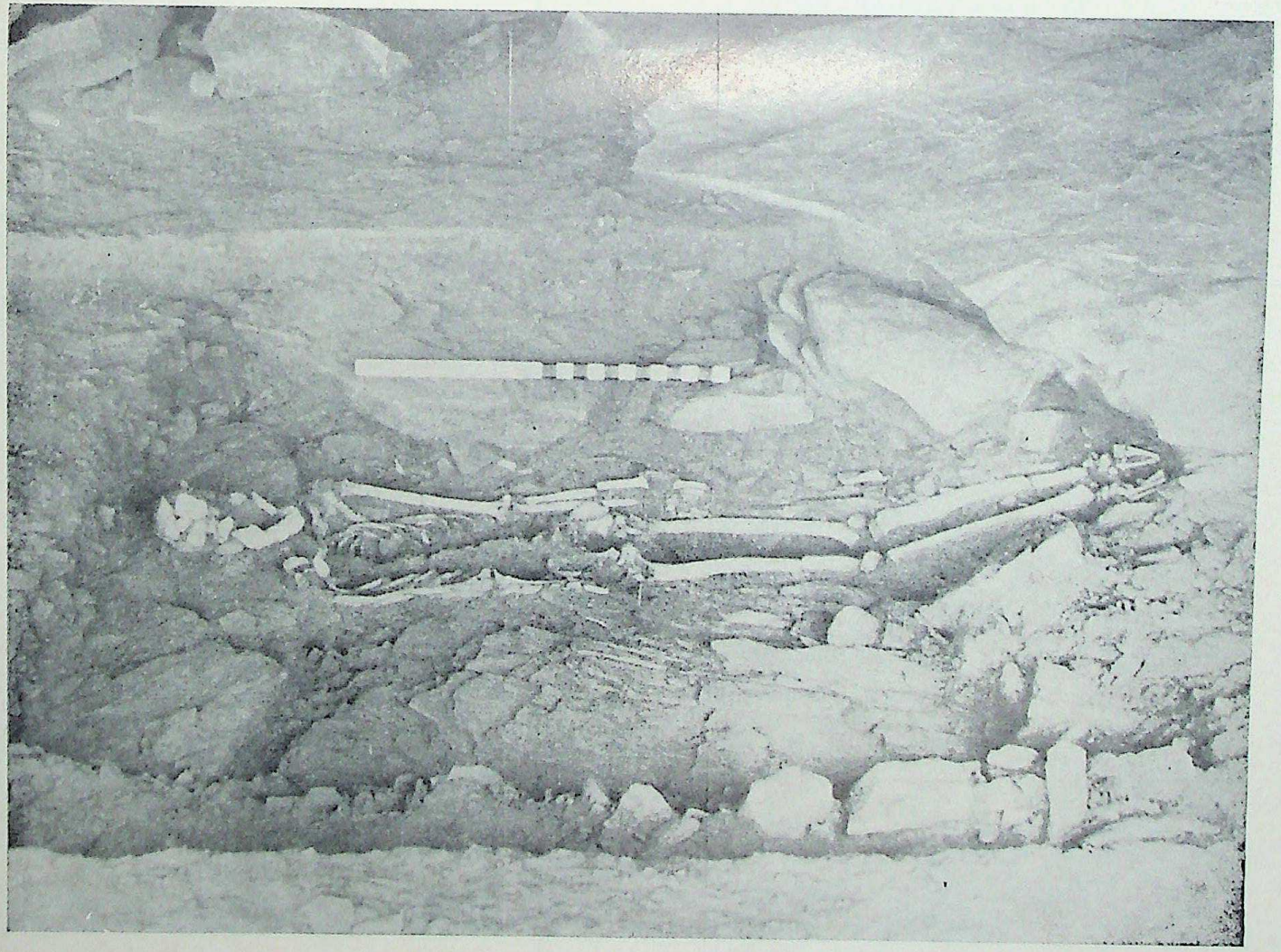


Plate I

Lekhahia, Extended burial in a rock-shelter, Late Stone Age (See page 20)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

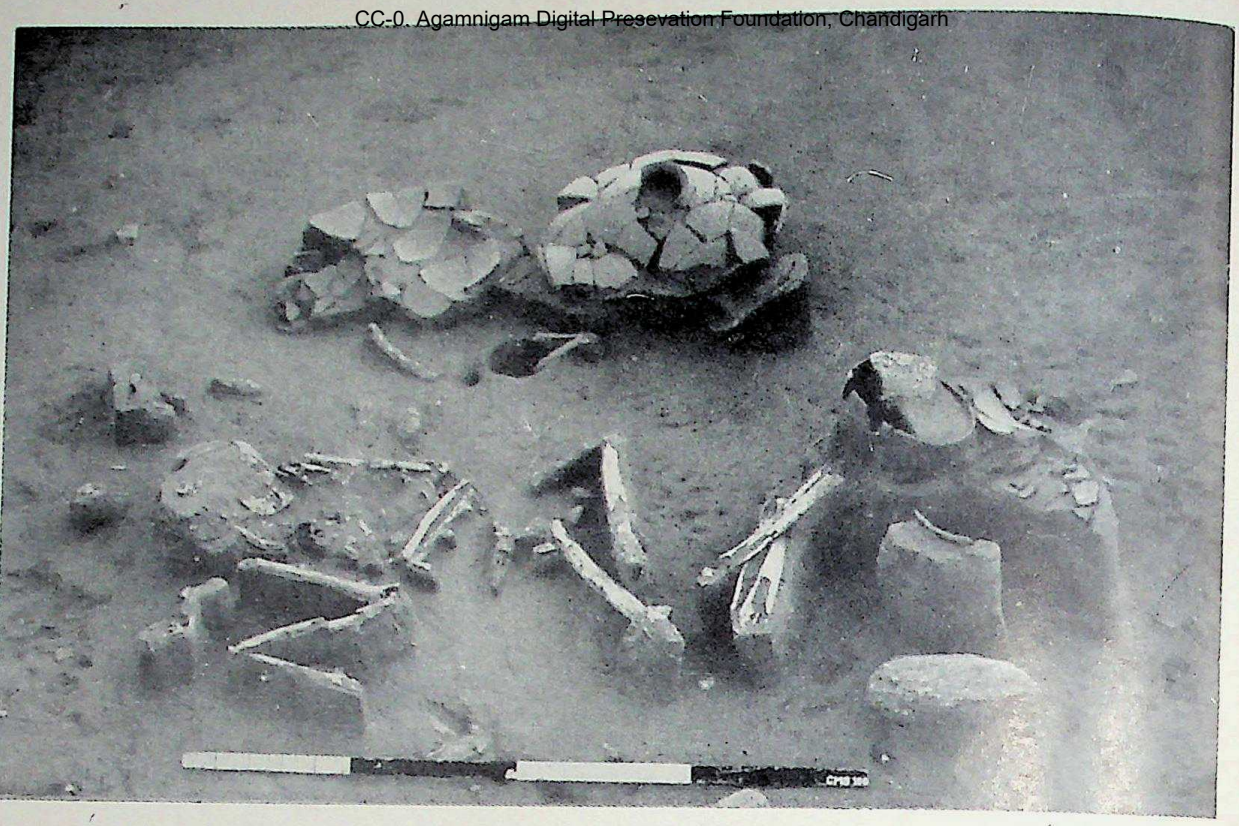


Plate II
Bagor, Extended burial on the floor of a hut, Late Stone Age (See page 28)

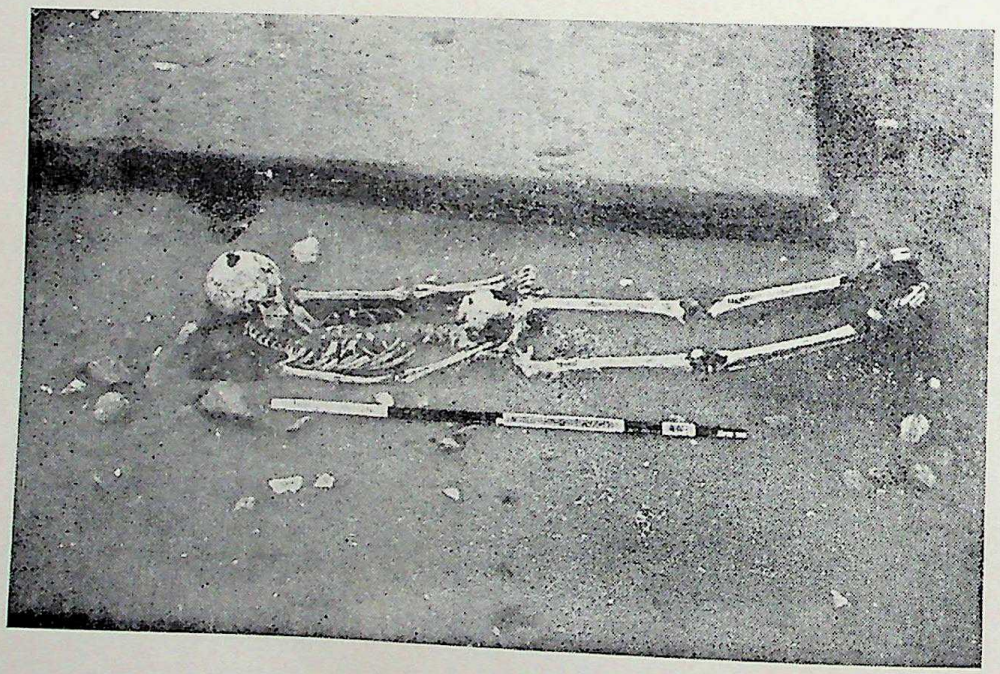


Plate III
Bagor, Extended burial, Chalcolithic Culture (See page 24)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

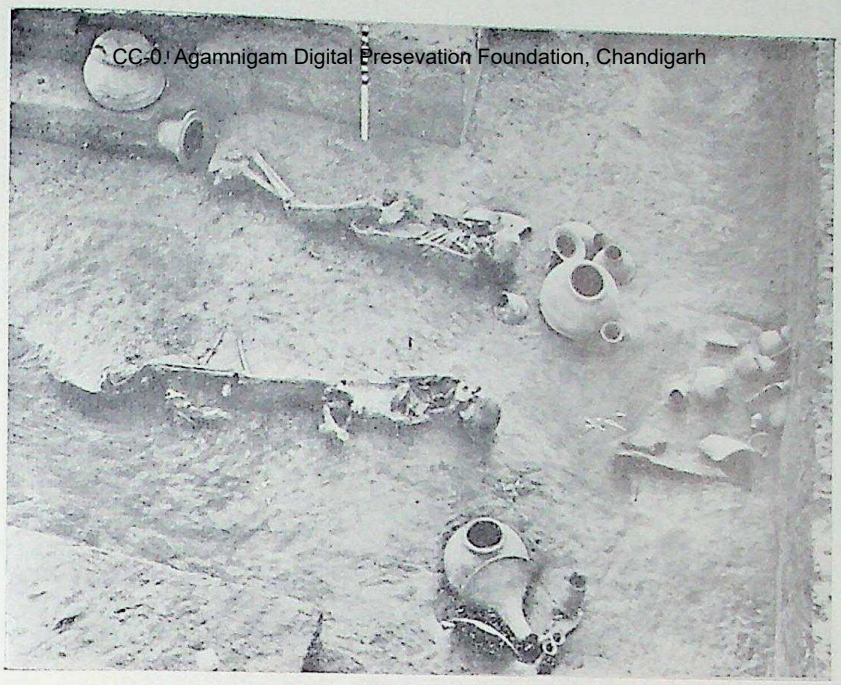


Plate IV
Harappa, Extended burials in Cemetery R 37,
Harappa Culture (See page 54)

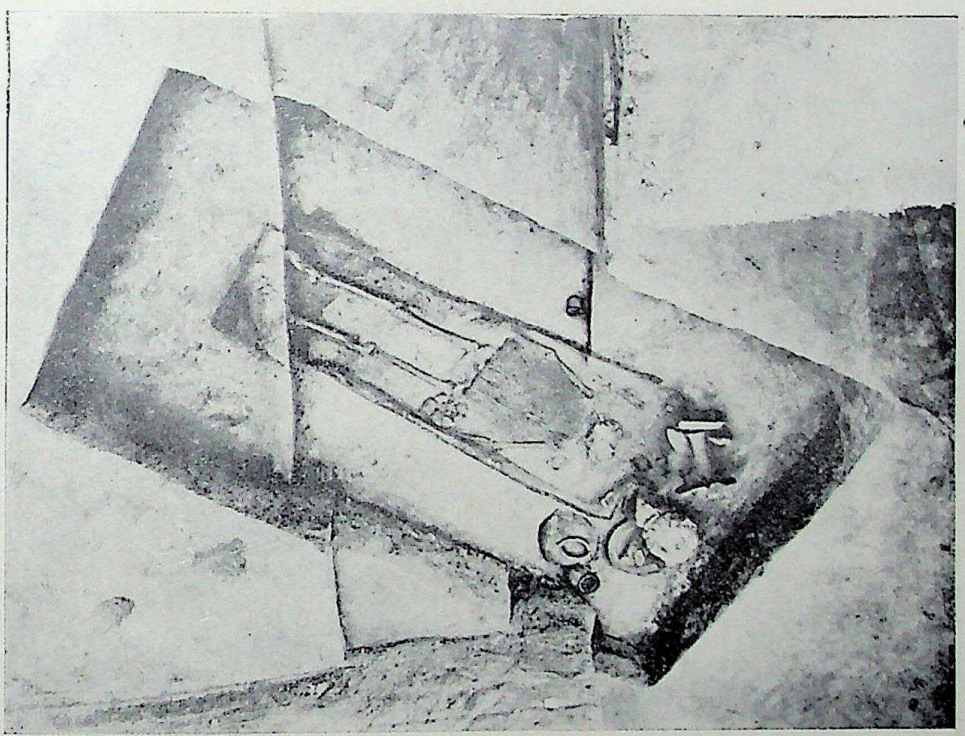


Plate V
Harappa, Coffin burial in Cemetery R 37,
Harappa Culture (See page 55)

Copyright © Research Foundation, Chandigarh

Plate VI
Chandigarh, the excavated cemetery, Harappa Culture (See page 60)

Plate VII
Kalibangan, Extended burial on a bed of pots in a pit lined with mud bricks Harappa Culture (See page 64)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

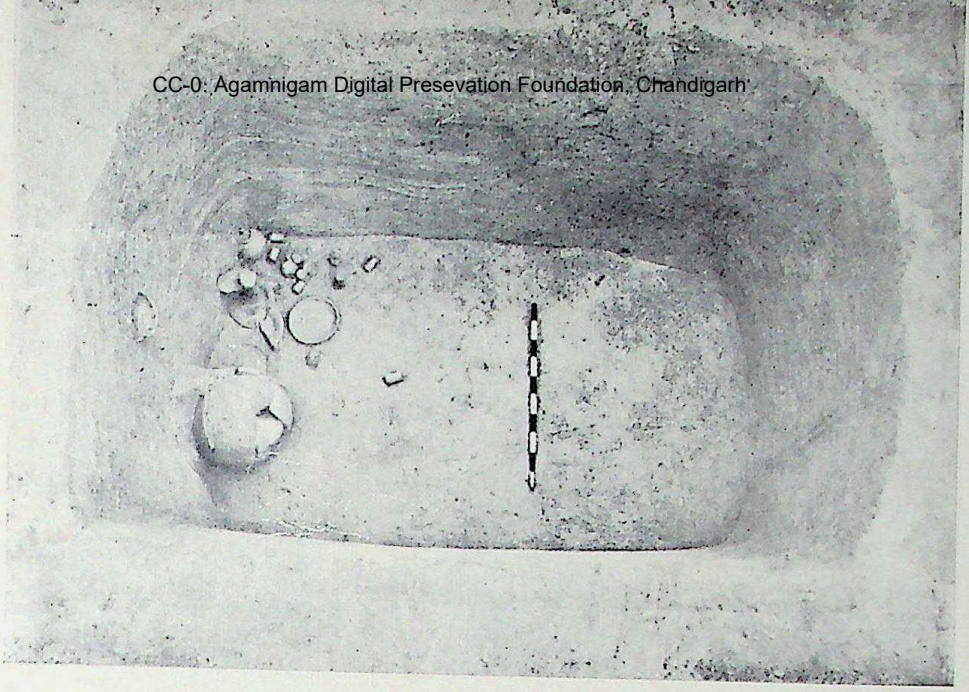


Plate VIII
Kalibangan, Rectangular pit with offerings but without skeletal remains, Harappa Culture (See page 65)

Plate IX
Kalibangan, Pot burials without bones in Round pits, Harappa Culture (See page 65)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

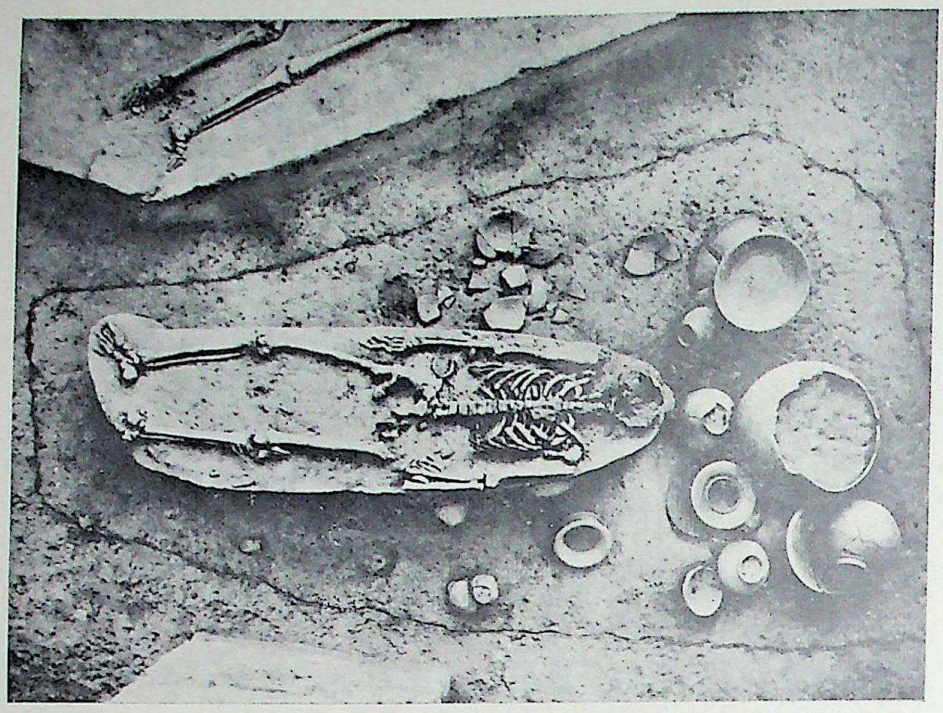


Plate X.
Rupar, Extended pit burials with
offering pots, Harappa Culture (See page 68)

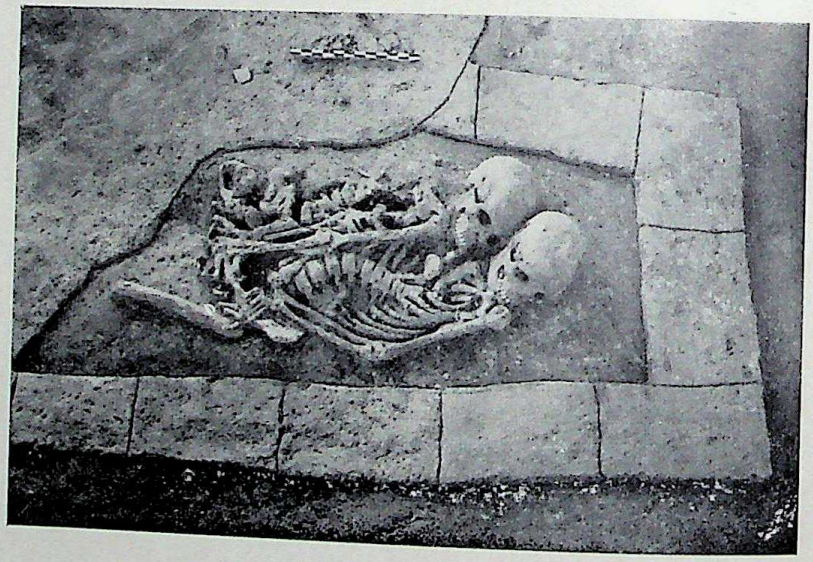


Plate X (a)
Lothal,'Double Burial' in a rectangular pit demarcated by
mud bricks, Harappa Culture (See page 69)

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

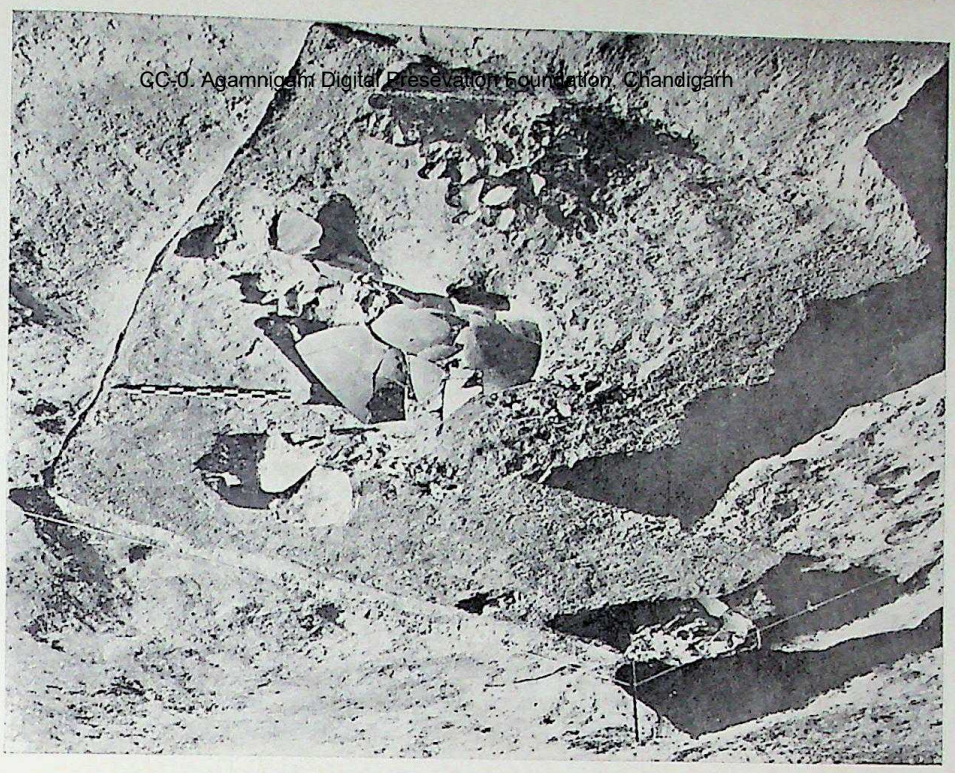


Plate XI
Tarkhanwala Dera, Cremation ground, Harappa Culture (See page 70)

Plate XII
Harappa, Jar burials from Cemetery H, Ravi Culture (See page 71)

CC-0

Plate XIII
Harappa, Jar Burial with Fragmentary bones from
Cemetery H, Ravi Culture (See page 72)

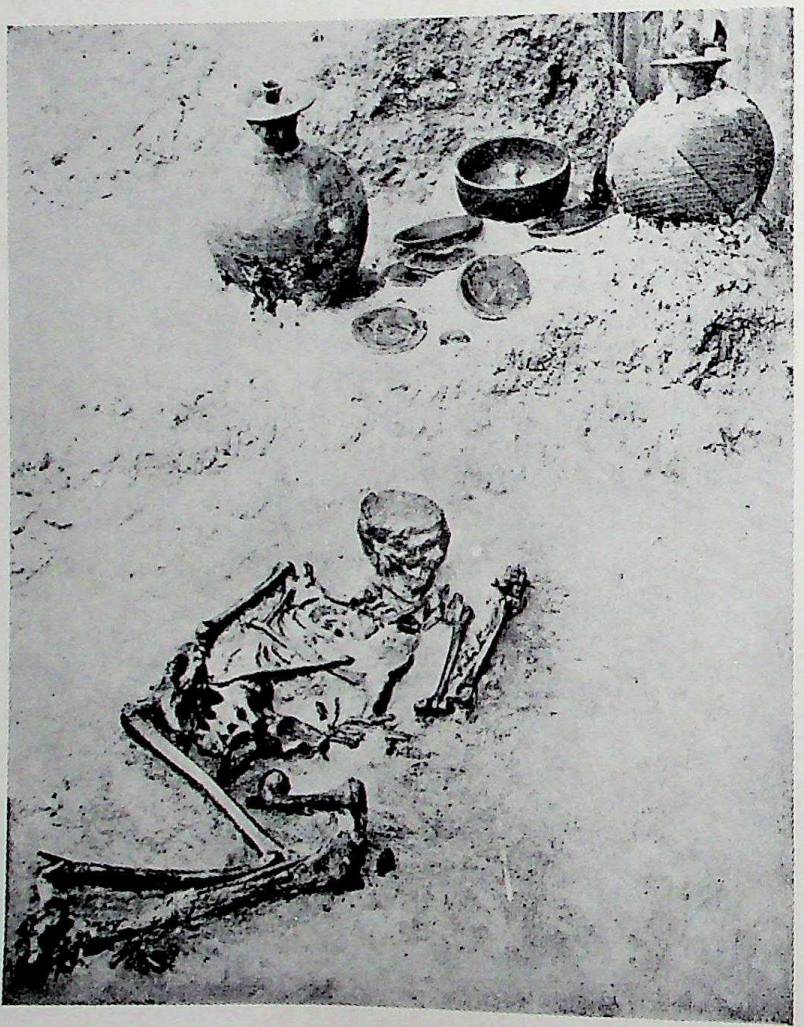


Plate XIV
Harappa, Flexed, Earth Burial, Ravi Culture (See page 72)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

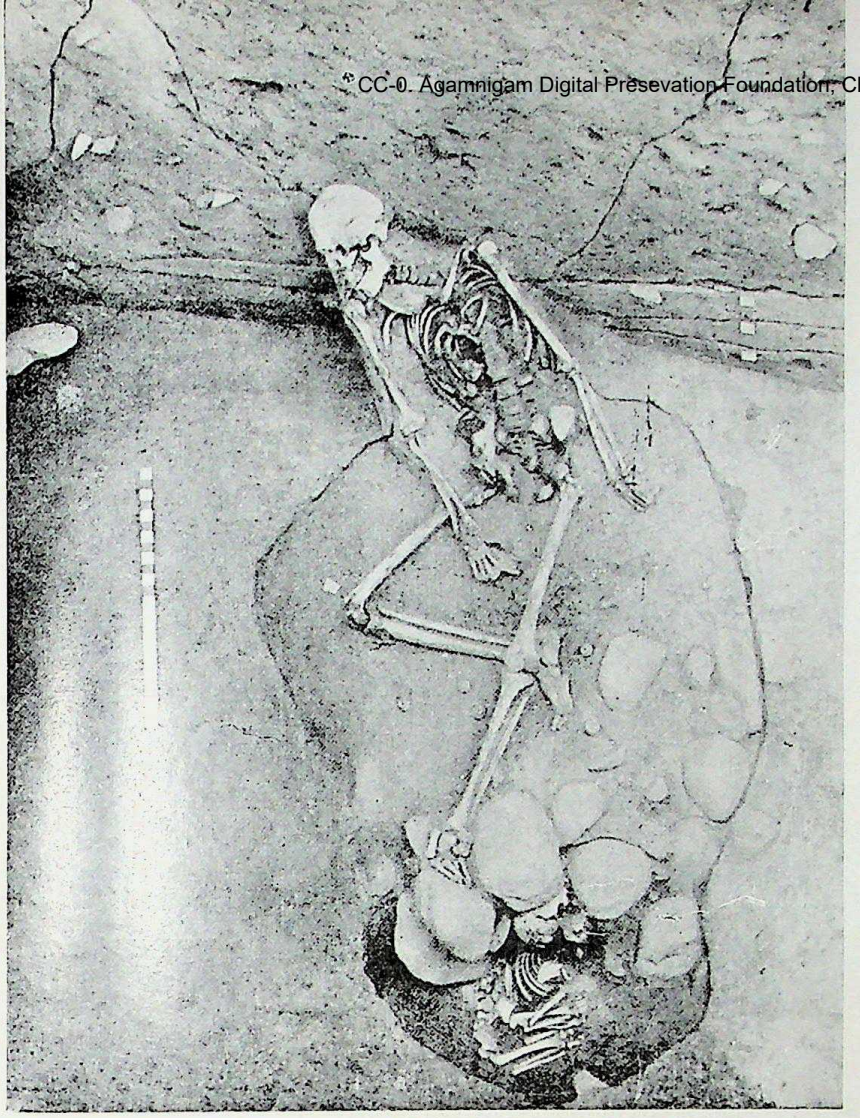


Plate XIV (a)
Burzahom, Reclining burial with the remains of a sacrificed animal, Neolithic Culture (See page 86)

Plate XV
Burzahom, Animal burial in a pit, Neolithic Culture (See page 88)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh.

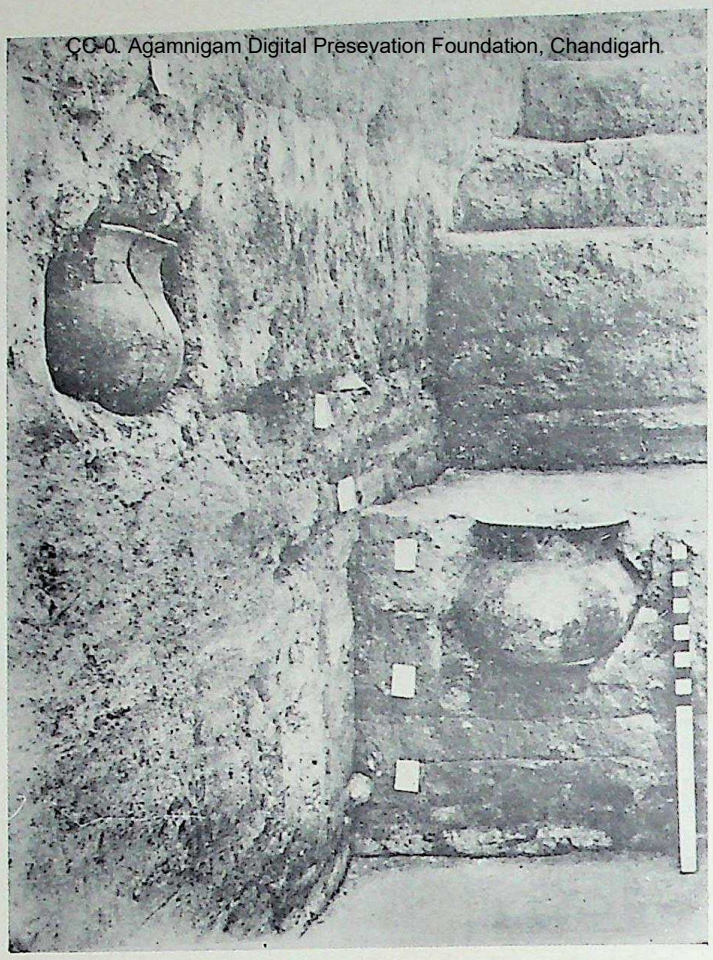


Plate XVI
Brahmagiri, Single Urn burials Chalcolithic Culture (See page 100)

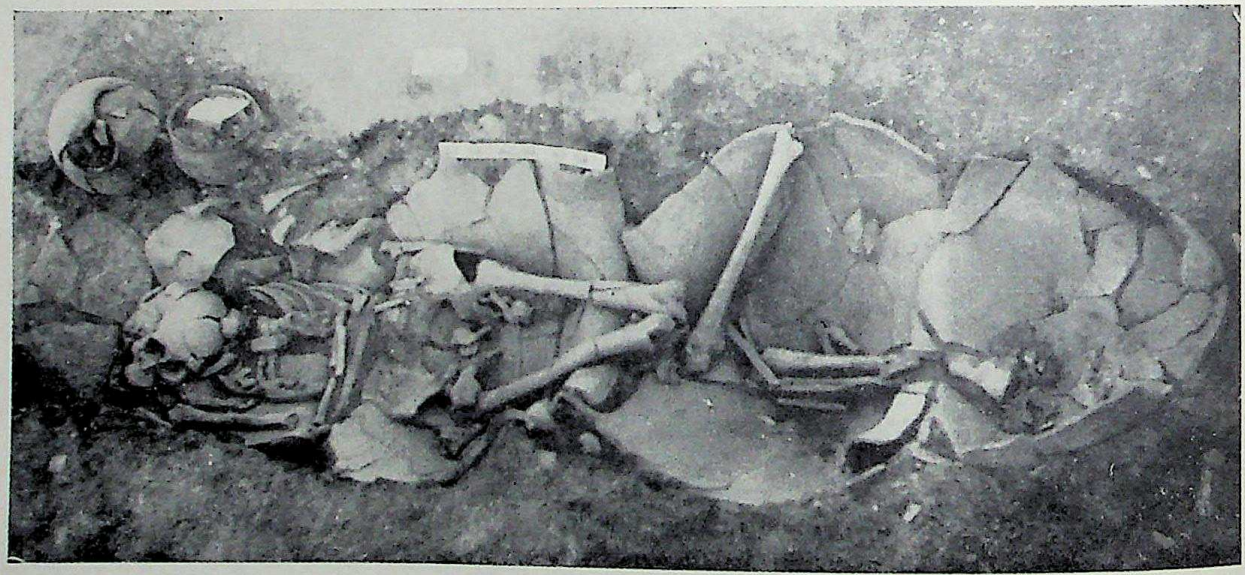


Plate XVI (a)
Tekkalkota, Multiple Jar burial with an Extended body,
Chalcolithic Culture (See page 99)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

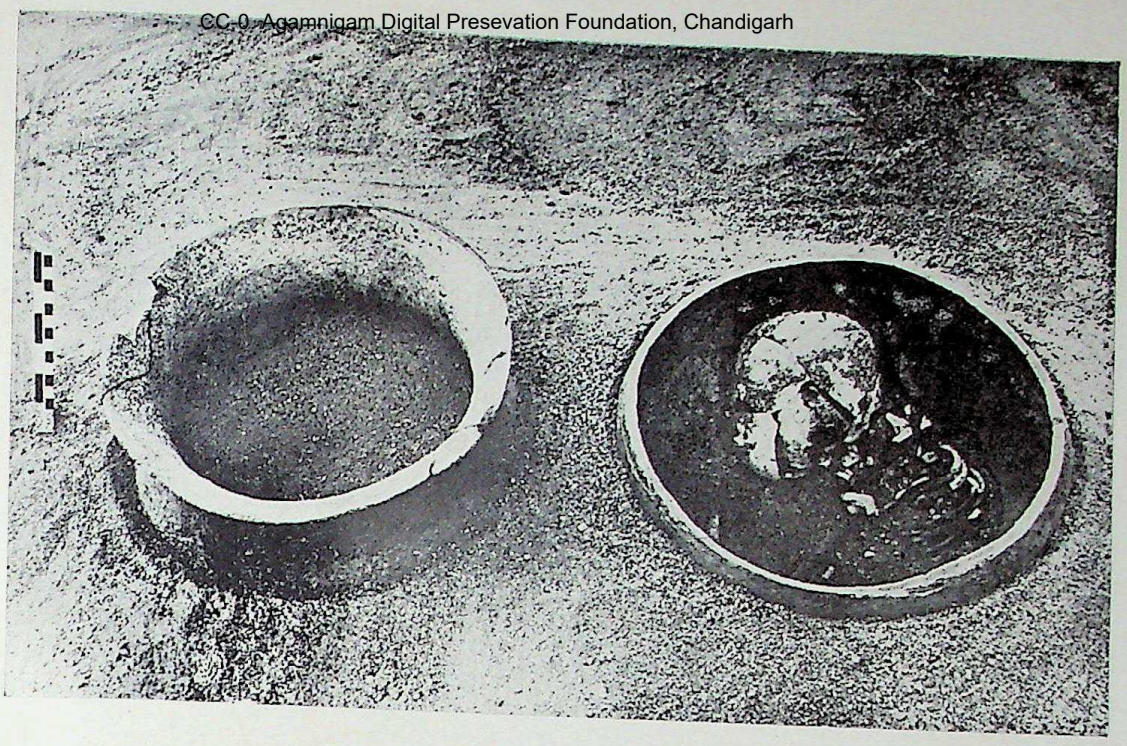


Plate XVII
Brahmagiri, Single Urn burial with an infant's complete skeleton, Chalcolithic Culture (See page 101)

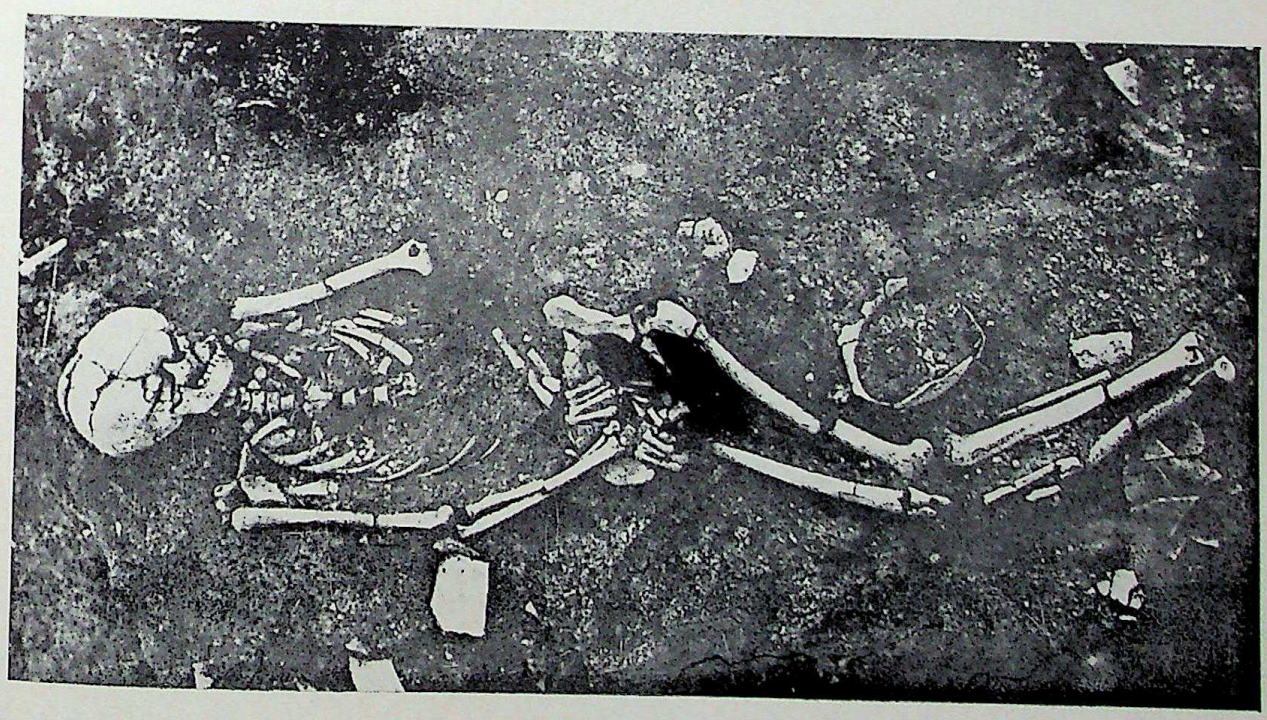


Plate XVIII
Nevasa, Extended burial of a grown up child, Chalcolithic Culture (See page 106)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

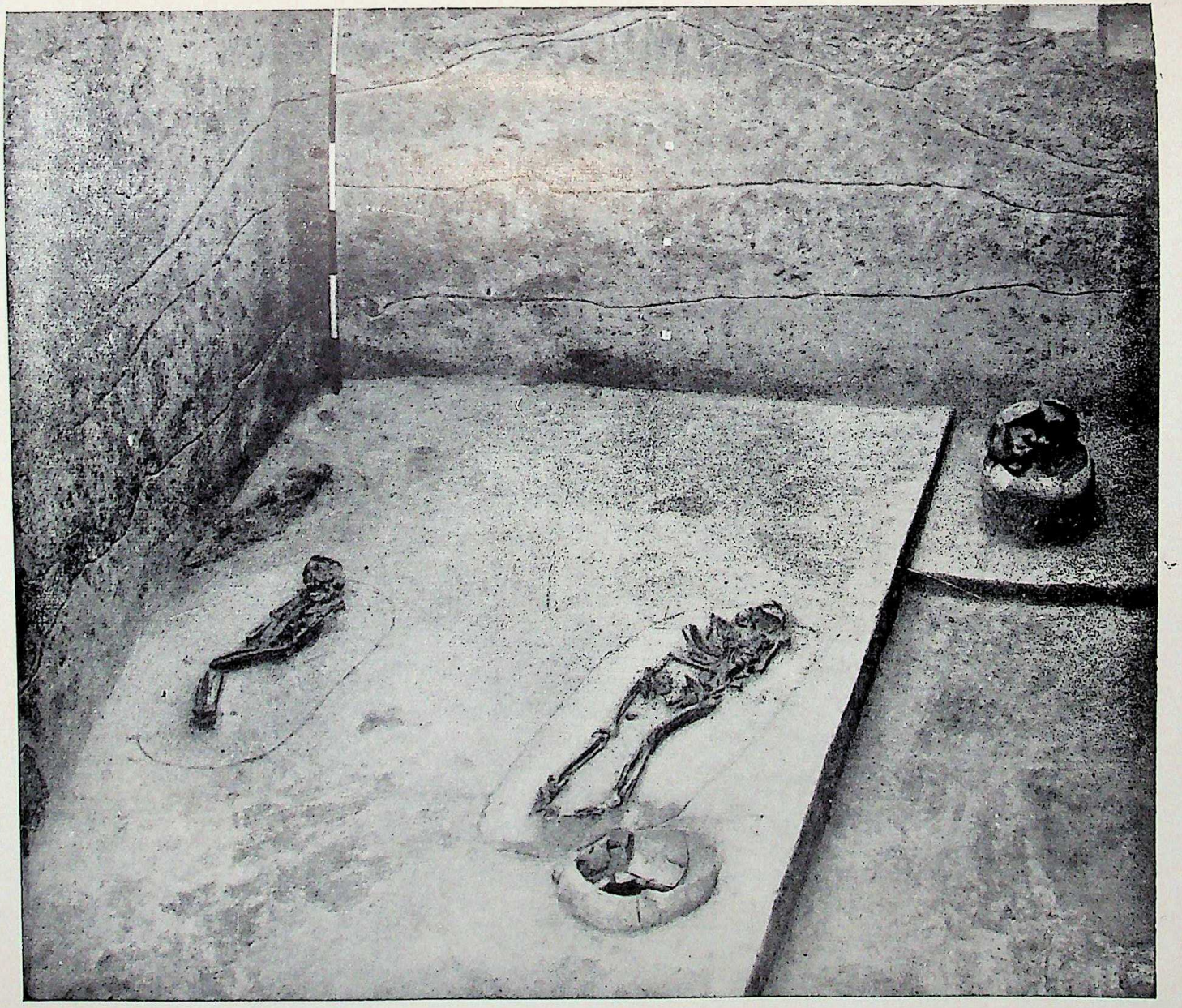


Plate XXII

Bank Bazar Dhibi Extended burials, Chalcolithic Culture (See page 117)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate XXIII
Pandu-Rajar-Dhibi, Double Urn burial,
Chalcolithic Culture (See page 118)

Plate XXIII (a)
Pandu-Rajar-Dhibi, Fragmentary bones in an
Urn burial, Chalcolithic Culture (See page 118)

Plate XXIV
Zangian, General view of Cairn burials, Iron Age (See page 133)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

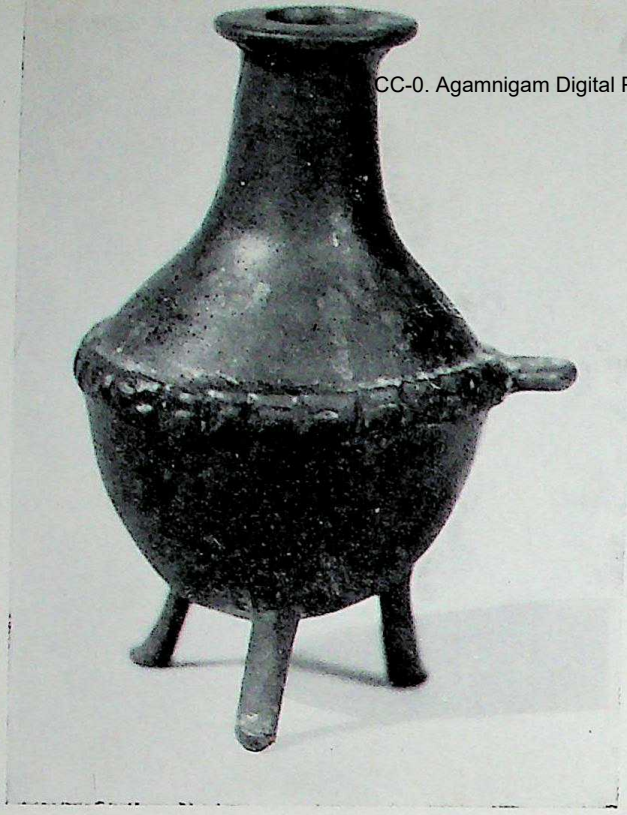


Plate XXV
Moghul Ghundai, bronze pot, (See page 142)

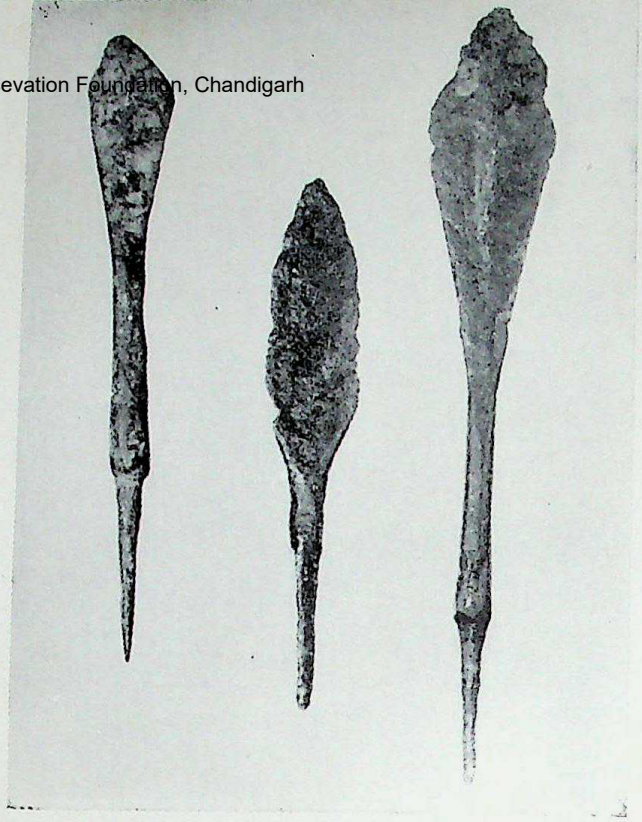


Plate XXVI
Moghul Ghundai, Iron arrowheads (See page 143)

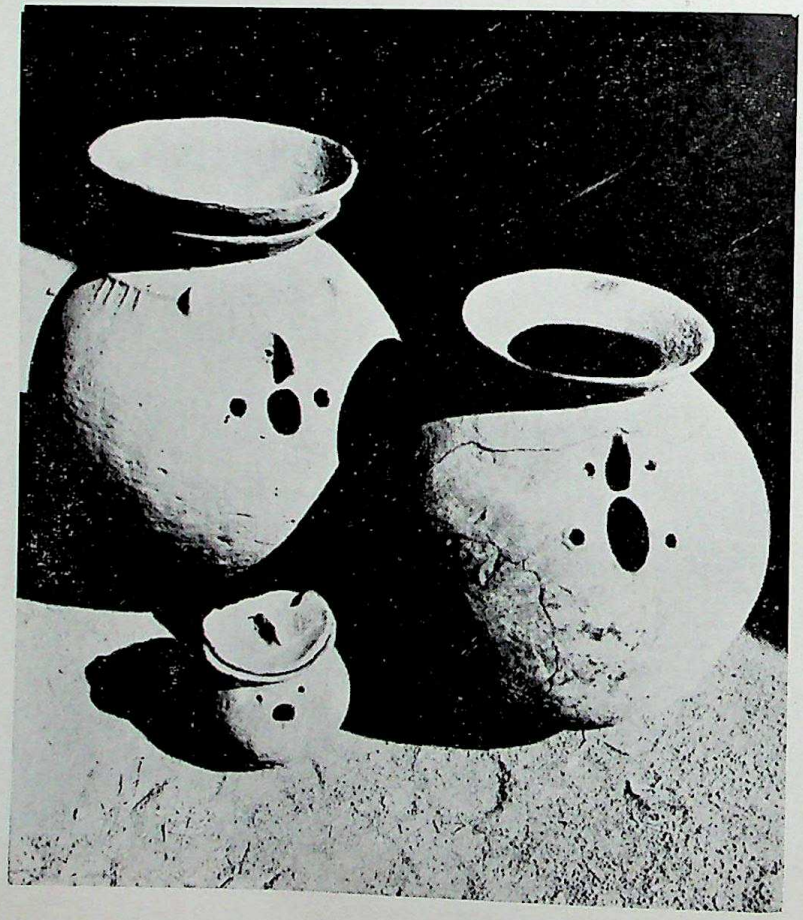


Plate XXVII
Katelai, 'Visag Urns' (See page 156)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

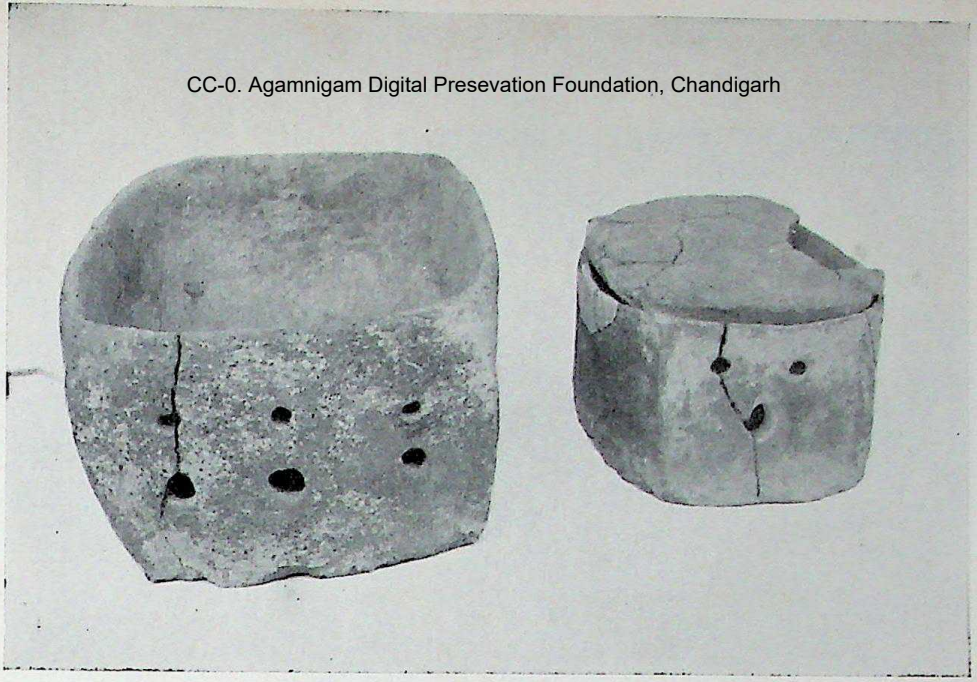


Plate XXVIII

Katelai, Terracotta 'Box Urn' burial, Swat Valley Graves (See page 156)

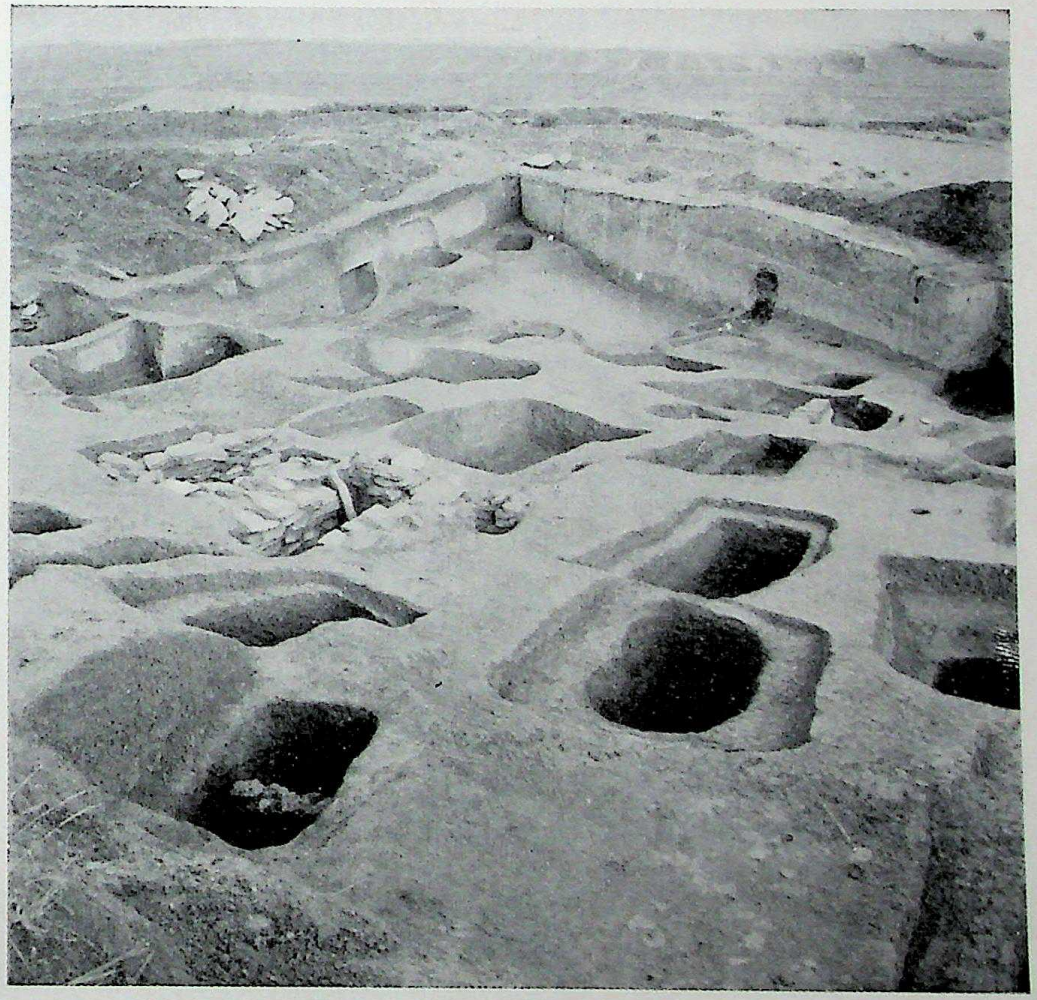


Plate XXIX

Katelai, General view of the excavated graves, Swat Valley Graves (See page 157)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

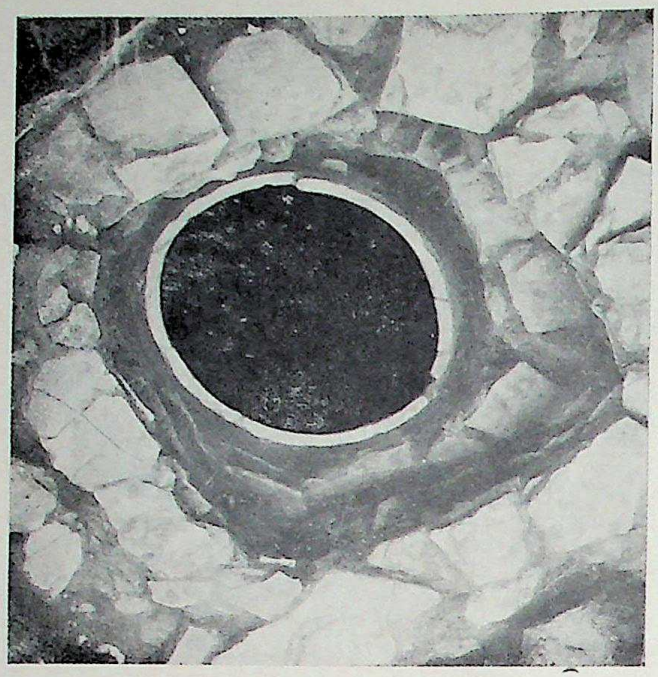


Plate XXX

Lalbatai, an Urn burial, Swat Valley

Graves, (See page 159)

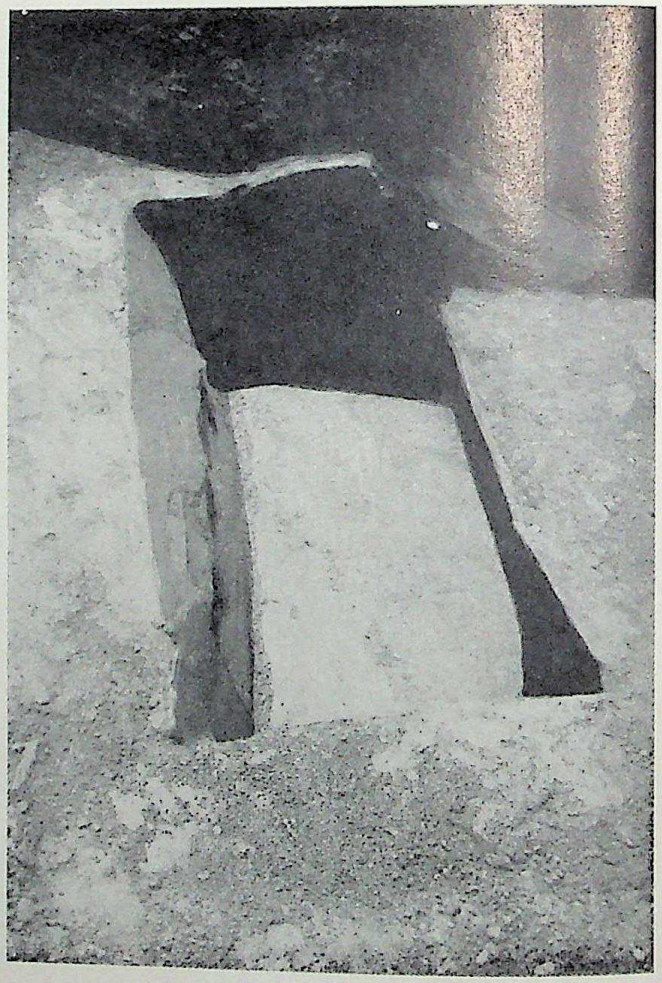


Plate XXXI

Pulanr, a Cist burial, Swat Valley

Graves (See page 159)

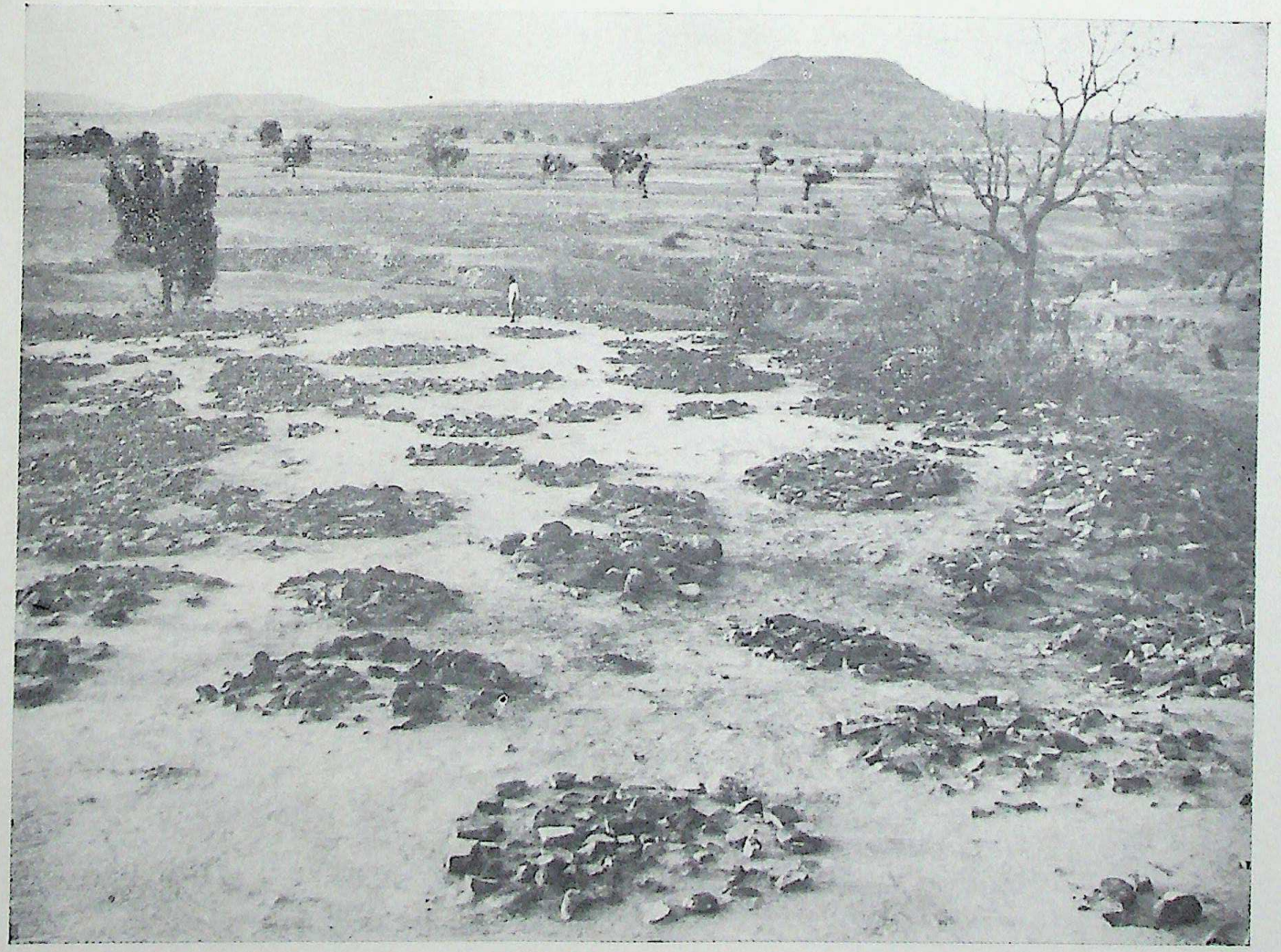


Plate XXXII

Kakoria, General view of the Cairn burials, Chalcolithic Culture (?) (See page 171)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

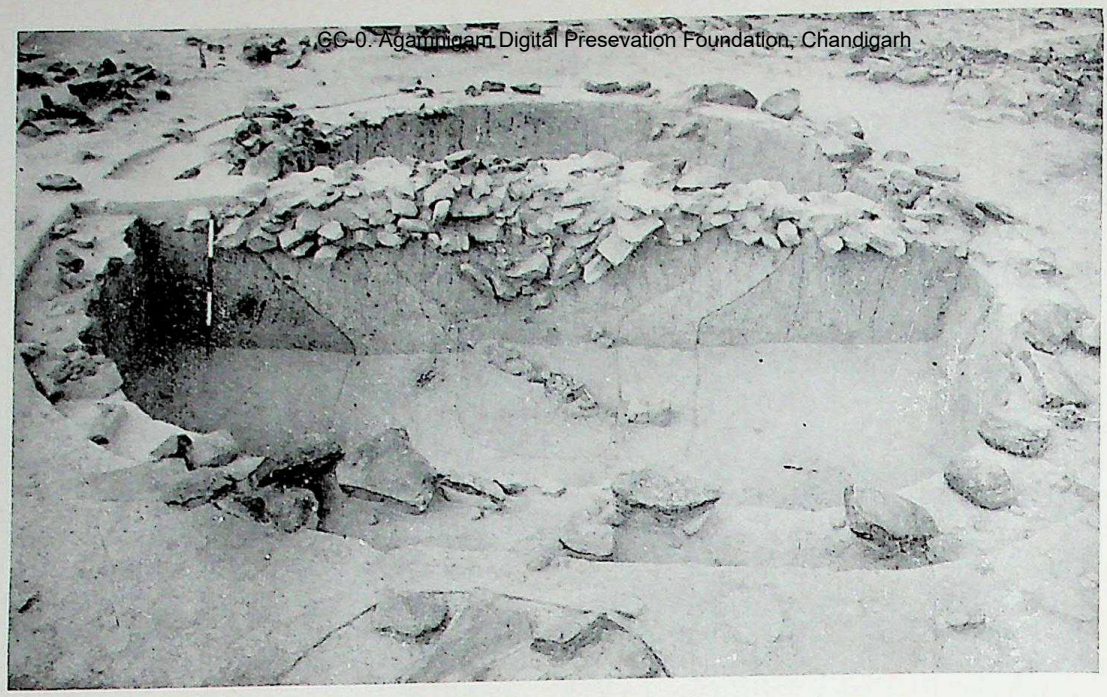


Plate XXXIII
Kakoria, pit-within pit in a Cairn burial, Chalcolithic Culture (?) (See page 172)

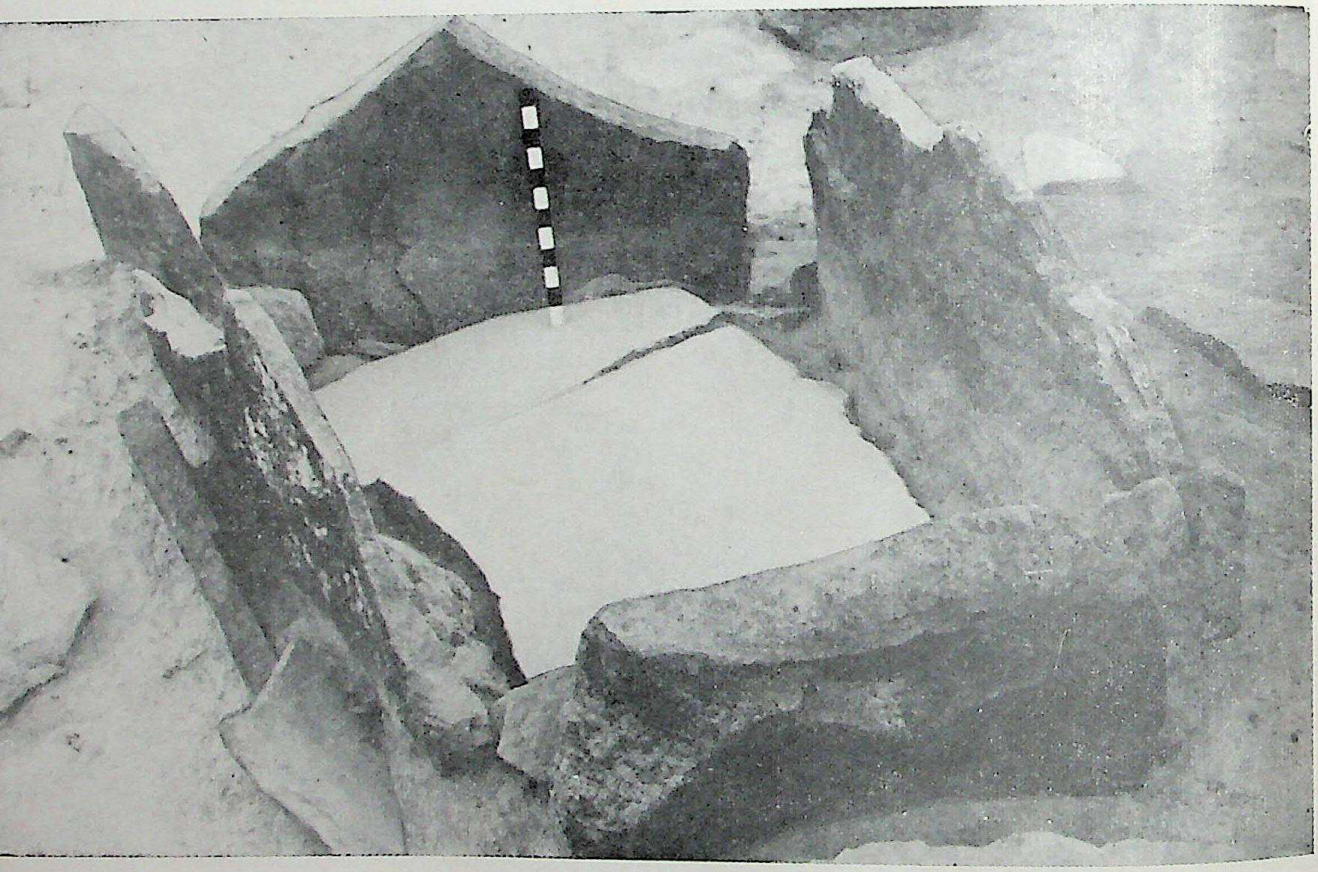


Plate XXXIV
Kakoria. an excavated Cist below a cairn, Chalcolithic Culture (?) (See page 173)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate XXXV
Kakoria, anoverground cist, Chalcolithic Culture (?) (See page 173)

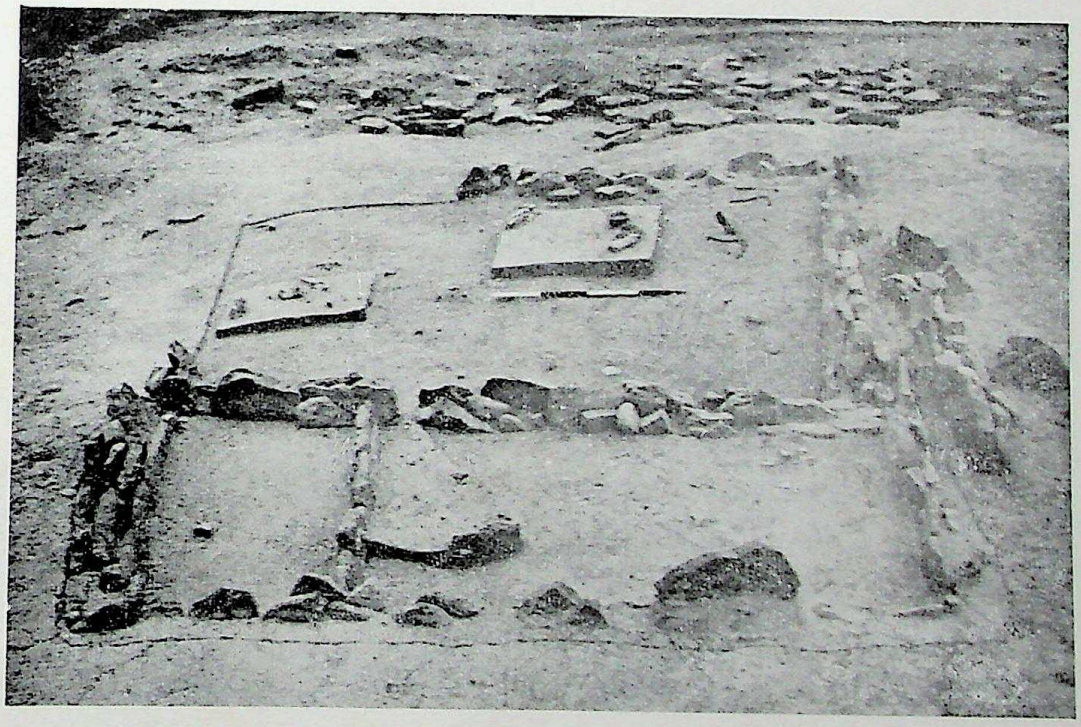


Plate XXXVI
Kotia, a 'Transepted Megalith' with animal bones, Iron Age (See page 175)

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

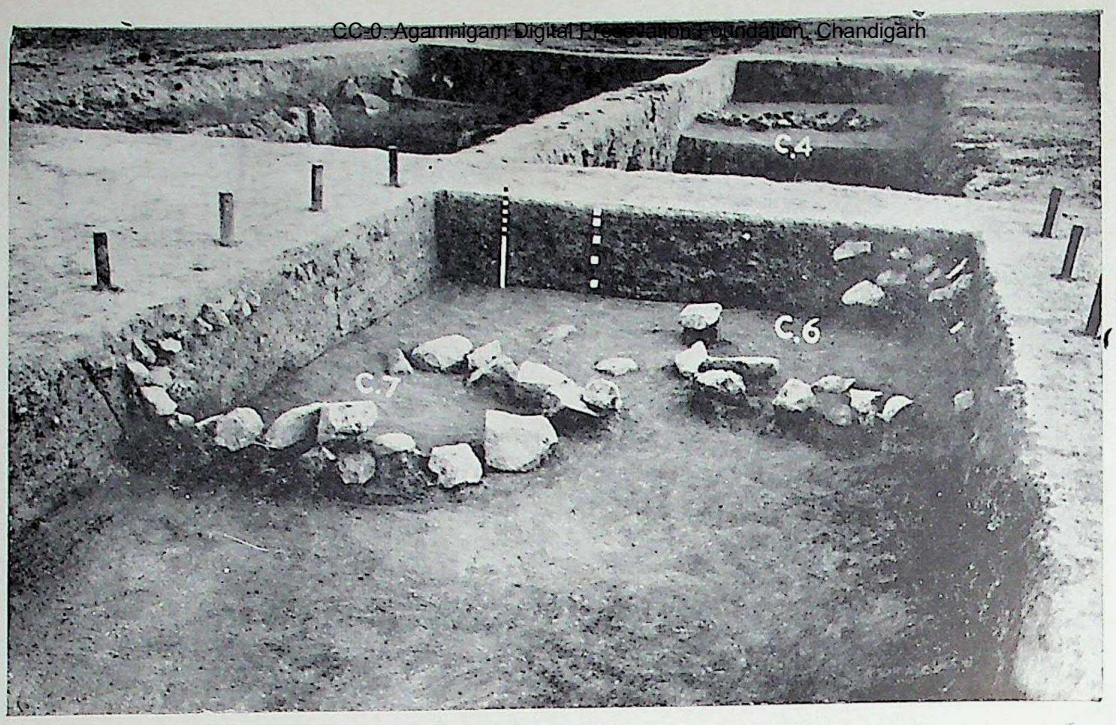


Plate XXXVII
Amreli, a Cairn burial, Iron Age (See page 181)

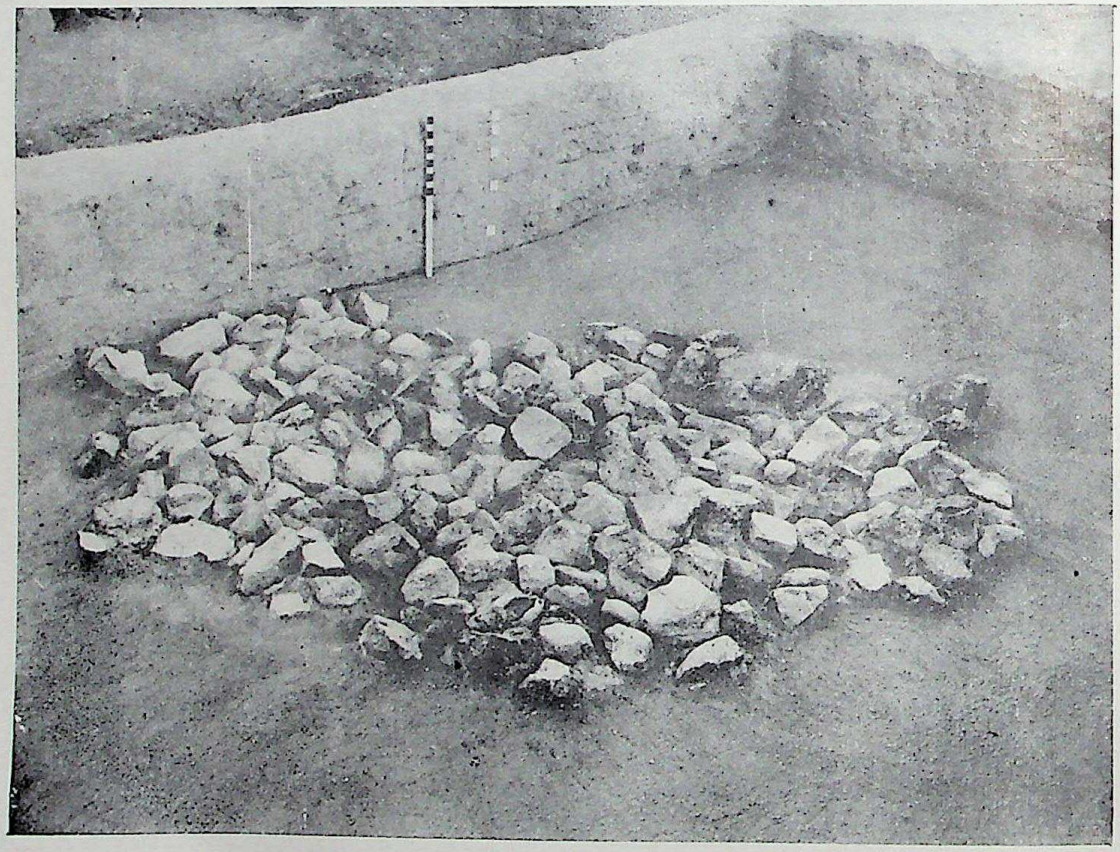


Plate XXXVIII
Amreli, Cairn-circles, Iron Age (See page 180)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate **XXXIX**

Brahmagiri, Megaliths of Cist-circle type, Hallur Culture (See page 201)

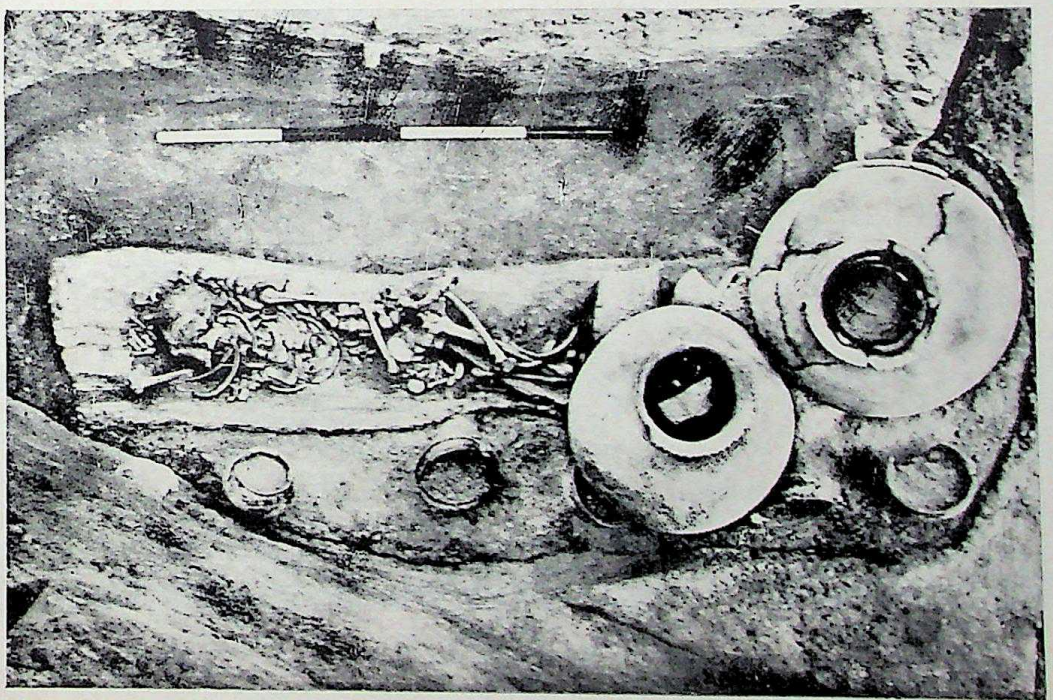


Plate **XL**

Maski, Extended pit burial, Hallur Culture (See page 205)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

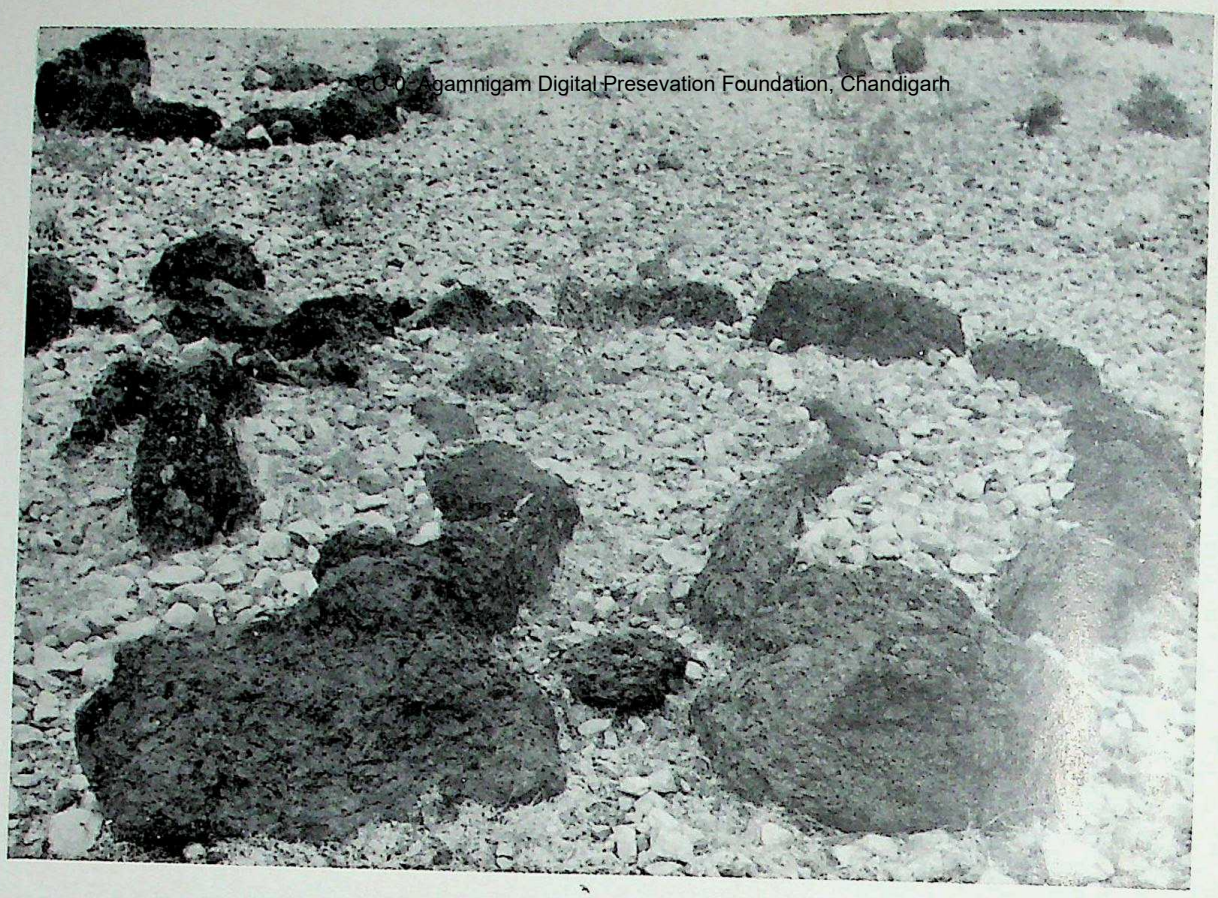


Plate XLI
Kaladgi, Passage Grave with circular chamber (See page 206)

Plate XLII
Kaladgi, Passage Grave with enclosure (See page 206)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

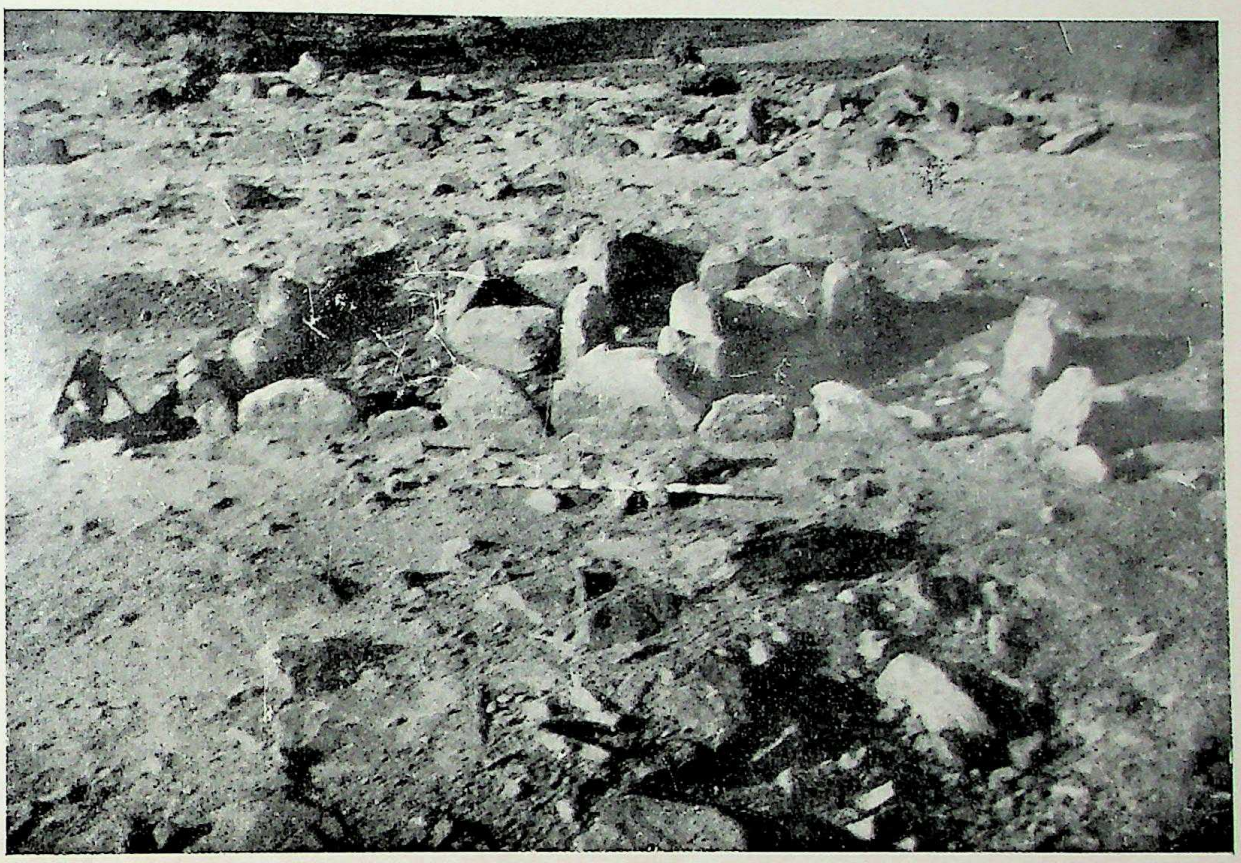


Plate XLII a
Terdal, Passage Grave of Greek cross type (See page 206)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate XLIII
Halingali, Passage Circular Chamber (See page 206)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

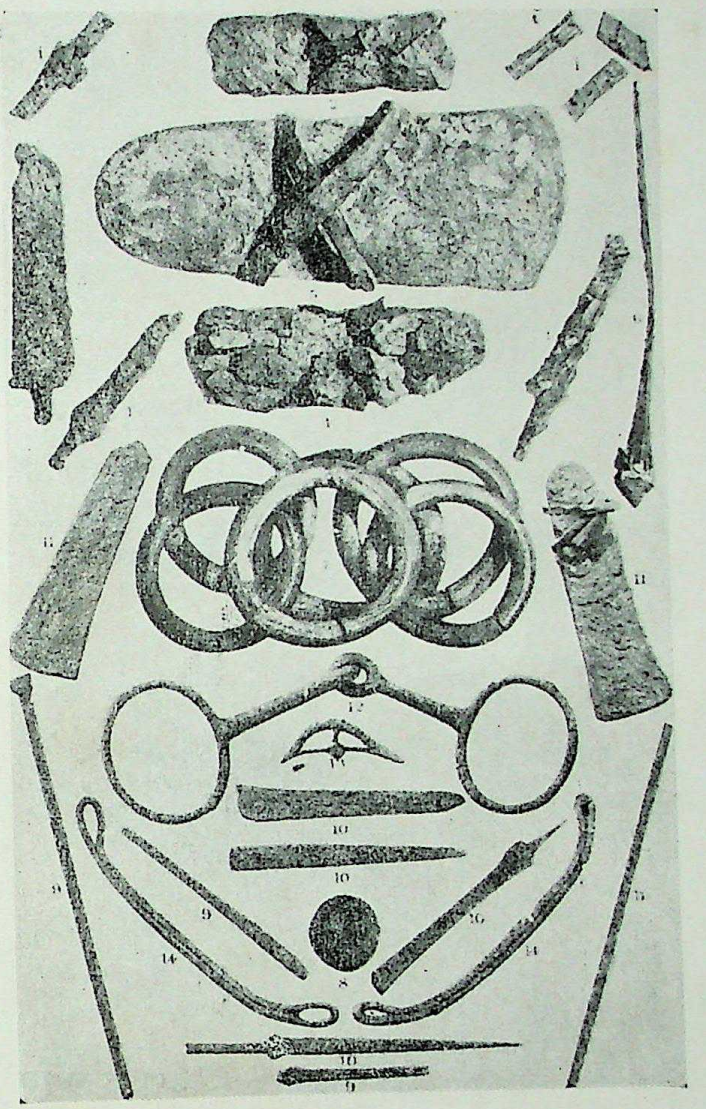


Plate XLIV
Junapani, metal objects, mainly iron, from megaliths, Iron Age *after Carnac* (See page 210)

State Museum Library Lucknow

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

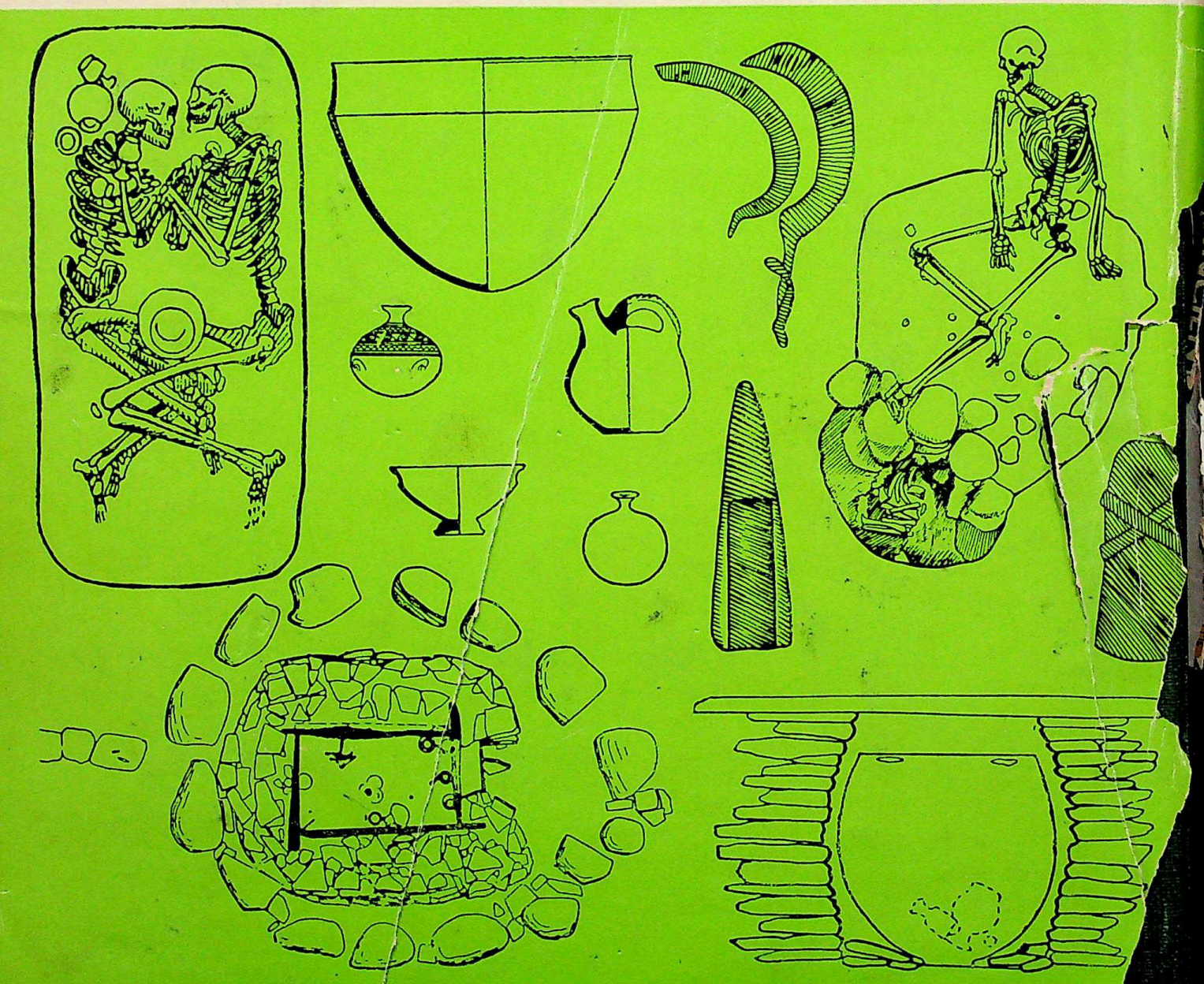
CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

"Our young and ebullient archaeologist, one of the leading ones of his generation, has in this book dealt with more things than its matter-of-fact title indicates. Through the mortuary practices of the prehistoric (including protohistoric) peoples of India, he has tried to understand the peoples themselves. His analyses of the historic cultures not merely show the depth of his study but breathe a refreshing outlook.

—From the Foreword by Shri A. Ghosh,.
former Director General, Archaeological Survey of India



ORIENTAL PUBLISHERS
DELHI-6. (India)